

# Contemporary Psychology

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*Films for review* and correspondence concerning films should be sent to the Film Editor, Adolph Manoil, Park College, Parkville, Mo.

*Communications concerning subscriptions*, change of address, claims for the nonreceipt of a number, advertising, and other business matters should be sent to the American Psychological Association, Inc., 1333 Sixteenth Street, N.W., Washington 6, D. C. Address changes must reach the Subscription Office by the 10th of the month to take effect the following month.

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# Contemporary Psychology

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## Of Prophecy and Privacy

**Leon Festinger, Henry W. Riecken, and Stanley Schachter**

**When Prophecy Fails.** Minneapolis: University of Minnesota Press, 1956. Pp. vii + 256. \$4.00.

*Reviewed by M. BREWSTER SMITH*

*Brewster Smith is Professor of Psychology in the Graduate Department of New York University, editor of the Journal of Abnormal and Social Psychology, co-author of Opinions and Personality, a person habitually concerned with the problems of social psychology and the psychology of personality.*

AT the approach of midnight one December 20 not long ago, fifteen persons maintained anxious vigil in a "Lake City" living room. For all of them the occasion was momentous, but the reader of this remarkable book knows what a casual visitor to the gathering would not have guessed: for five members of the company the occasion had entirely different significance than for the other ten. Ostensibly, the entire group was awaiting spacemen who, at the appointed hour, were to rescue them in flying saucers from the world-wide cataclysm of earthquake and flood that they expected before dawn. In fact, five persons—a third of those present—were participant observers who had been following the band of believers for more than a month, awaiting opportunity to test some theoretically-based predictions about what happens in social movements 'when prophecy fails.' Fortunately for the reader, the prophecy did fail; less predictably, the prophecy was

explicit and remained so to the crucial hour; the disconfirmation was unequivocal.

Clearly this is no routine research report. The book, an eminently readable one, represents a noteworthy venture in at least four respects, around which my subsequent comments will be focused. First, it is an exemplary instance in which alert social psychologists with a theory to test were able to see the relevance of a passing event, and to respond to it in time and in sufficient force to capture the pertinent data. Incidental to testing their central hypothesis, secondly, the authors provide an inside account of a miniature apocalyptic movement, an account that is fascinating quite apart from its bearing on the authors' theory. Securing the necessary information from such a socially marginal group, in the third place, tested the resourcefulness of the observers. Their account of the unusual problems they encountered and how they attempted to solve them (given in a methodological appendix) will be of special interest to investigators not intimidated by the barrier between the laboratory and 'real life.' Finally, the authors' temerity and success in covertly penetrating others' privacy, essential as it was to the enterprise, raises some serious problems of research ethics, problems hardly encoun-

tered when psychologists confine themselves to the accustomed laboratory or clinic. The authors have elected to present their findings without discussing the ethical ambiguities that must have troubled them and their associates. The difficulties remain, however, and the rest of us would do well to face them more explicitly.

In the background of the study lies Festinger's theory of consonance and dissonance. Since he has yet to publish a definitive account of this doctrine which is only sketchily summarized in the book, the reader is in no position to evaluate the theoretical context from which the central hypothesis derives. In capsule form, however, the conception is simple enough and scarcely novel.

Dissonance and consonance are relations among cognitions—that is, among opinions, beliefs, knowledge of the environment, and knowledge of one's own actions and feelings. Two opinions, or beliefs, or items of knowledge are *dissonant* with each other if they do not fit together—if they are inconsistent, or if, considering only the two particular items, one does not follow from the other. . . . Dissonance produces discomfort and, correspondingly, there will arise pressures to reduce or eliminate the dissonance. . . . [Attempts to reduce dissonance] may take any or all of three forms. The person may try to change one or more of the beliefs,



opinions, or behaviors involved in the dissonance; to acquire new information or beliefs that will increase the existing consonance and thus cause the total dissonance to be reduced; or to forget or reduce the importance of those cognitions that are in a dissonant relationship. If any of the above attempts are to be successful, they must meet with support from either the physical or the social environment (pp. 25-26).

One implication of this view is that when a person is unshakably committed to a conviction that is unequivocally refuted, his impasse of intolerable dissonance may be resolved if he can persuade others that his system of belief is correct, thus creating a consonant social reality. Historical instances of prophetic movements seemed to offer cases in point. The unquestioned disconfirmation of specific prophecy should be followed, say the authors, by a burst of proselytizing among the committed followers. But History is a tantalizing, unsatisfactory mistress to those who approach her with scientific questions. Even in the most adequately documented cases, the results of successful proselytizing, not the efforts themselves whatever their outcome, are most likely to be recorded, while the negative case that could disprove the formulation would likely escape the historian's notice. The authors' review of available accounts of several such groups (notably the Millerites, but they gave a discreet but provocative side glance at the early Christians) left Festinger's hypothesis unrefuted, plausible, yet still unconfirmed.

At this juncture, luck brought to the authors' attention a headline on one of the back pages of a 'Lake City' newspaper: PROPHECY FROM PLANET. CLARION CALL TO CITY: FLEE THAT FLOOD. IT'LL SWAMP US ON DECEMBER 21, OUTER SPACE TELLS SUBURBANITE. The story told of a 'Mrs. Keech' who had allegedly been receiving messages from superior beings on a planet called 'Clarion.' This seemed a promising opportunity to conduct a field test of the hypothesis. It was then late September. Within little more than a month the authors had made a preliminary reconnaissance, recruited and trained observers, and joined the group as participants to collect data about the conviction, commitment, and proselytizing



LEON FESTINGER

activity of the persons who were actively interested in Mrs. Keech's ideas. It was also necessary to carry on observations in 'Collegeville' about a hundred miles away, where 'Dr. Armstrong,' a college physician, and his wife had brought Mrs. Keech's messages to the 'Seekers,' a non-denominational religious group of young people, mainly college students.

The story of Mrs. Keech's prophecy, its background as reconstructed, and its disconfirmation and aftermath as directly observed, comprise the major part of the book. Happenstance and personal ties seem to have brought the group together within the limbo of cults and believers in which notions of flying saucers, science fiction, dianetics, spiritualism, vegetarianism and extra-sensory perception are received uncritically as common currency.

Throughout the brief life of the movement up to its latter days, the members showed little interest in proselytizing. It took some ingenuity, indeed, for the would-be observers to penetrate the barrier of protective reticence. When the spacemen failed to arrive after more than one postponement, however, the Lake City group abandoned all secretiveness. Casual curiosity-seekers were harangued, and the faithful who remained after the final debacle sought eagerly to spread their 'Christmas message' (the world had

been miraculously spared) over the wire services and networks. Meanwhile, the believing Seekers at Collegeville, dispersed for the Christmas holidays and bereft of the leadership of the Armstrongs (then with Mrs. Keech), provided a fortunate comparison for testing an additional theoretical point: that social support must be available subsequent to the disconfirmation for the proselytizing response to occur. As predicted, disconfirmation among the Collegeville group led to decreased conviction and had either no effect on proselytizing or tended to inhibit it.

For testing the proselytizing hypothesis, as the authors freely admit, the data in all their individual detail provide but a single confirmatory case. The hypothesis can hardly be considered proved, much less Festinger's consonance-dissonance theory from which it is only loosely derived in the present book. Unlike the historical examples, however, the case is well documented on the theoretically pertinent issues. The authors' research strategy, moreover, is one that social psychologists might well emulate. How better to advance a science of social phenomena than to capture elusive social events and put to them questions of theory forged and sharpened in the laboratory? Luck is required to turn the passing event to scientific advantage, but serendipity can be nurtured by imaginativeness and institutional flexibility. Perhaps research institutes like the Minnesota one can provide for a planful flexibility of operations that will make such studies less of a rarity than they are at present.

THE proselytizing hypothesis concerns only one detail, though a crucial one, in the life of social movements. It stimulated observations, however, that result in a most interesting case study. Without losing sight of their research objective, the authors have achieved a vivid picture of a bizarre world; their theoretical perspective results in a far more illuminating and provocative account of it than mere natural history description would be likely to have given us. The student of social movements will find a variety of observations to whet his curiosity: on the powers and perils of leadership-by-inspiration, for example. Inevitably he will also





HENRY W. RIECKEN

wish that the investigators had addressed themselves to some of *his* questions. To give one of mine—how relevant it would have been to an understanding of this chronicle of the 'lunatic fringe' had we been offered some appraisal of the psychological resources of participants and followers, in relation to their receptiveness of the odd social reality in which they participated and to their inventiveness within its framework. The authors could not of course avail themselves of the clinician's kit-bag, and their impressions they keep discreetly to themselves.

Methodologically, Festinger and his colleagues provide a demonstration, if one is needed, that there is still an important place for qualitative research in social psychology, and that, indeed, such research demands a high order of skills and ingenuity. A particularly vexing problem confronted them in their attempt to keep to a minimum the 'Heisenberg effect' of their influencing the processes they were observing themselves. It was, after all, a very small movement that gathered about Mrs. Keech and the Armstrongs—some dozen more or less committed believers in Lake City and about as many more in Collegeville. In this setting the observers constituted an appreciable minority. To maintain rapport they could not afford to play a purely passive role. By their very presence they lent credibility to the group's beliefs, and circumstances often forced them to take a more active part. Clearly they influenced the group. The specificity of the research objective, however, made a compromise solution possible: the observers were able, so far as their records

and testimony show, to avoid any direct influence on proselytizing activity. Had they not had a well-focused hypothesis to test, their role and influence would necessarily have been more ambiguous.

**T**HERE can be no question that the authors and their observers were highly resourceful in gaining entrée to the movement and in playing the role of believer while gathering the data that they needed. So the question will be raised, and it has been, as to whether they ought to have done it. To some this looks like 'jury bugging.' To most psychologists and persons concerned with the values of social research, a serious ethical dilemma is posed. How private is privacy? And how fundamental, how 'inalienable' is the 'private' citizen's right to it?

The social scientists' transgression, if it be one, consists of looking and telling, and somewhat different issues are involved in each. In telling, the present authors are conventionally scrupulous. They treat their specimens with objectivity, even dignity, and employ conventional disguises. Had they been able to report their experiences in full detail without concern for anonymity, their story would have been even more interesting than it is. All the same, with such a unique and well-publicized sequence of events, no disguise is really satisfactory.

What of the looking? Here is the more serious problem, and one for which current psychological ethics has no ready answer. Prying by means of false pretenses goes against the grain of most of us, and, in the present case, it goes beyond the deceptions that have become almost conventional in some areas of psychological experimentation—experimentation on subjects, be it noted, who have agreed to be studied. That good journalists have resorted to similar subterfuge does not seem to help with the scientist's ethical problem; both journalist and scientist have to come to terms with private and public interests, but their activities and purposes impinge on these interests in ways too different to make the parallel very instructive. Neither is the difficulty resolved by such possibly 'extenuating circumstances' as the fact that the group studied was from the deviant fringe (have deviants no right of privacy?), or that after all they welcomed

the observers as members (yet not as *observers*!). No, it is hard to avoid the conclusion that covert participant observation, as in the present study, is ethically bad. Some will think it absolutely bad, that is to say, inexcusable, and it is hard to argue with them. Others will think it relatively bad, that is to say, undesirable in itself but capable of being balanced by countervailing good. It is also hard to argue with *them*.

For those who are willing to regard privacy from scientific snooping as a relative right, the case can be made that the scientist's goals of knowledge and understanding warrant the infringement. The case becomes especially strong when, as in much medical research, the knowledge sought is recognized quite generally as bearing directly on the public good. But the search for knowledge for its own sake—as in the present instance—presents a thornier problem. Does its justification (in opposition to private interests) depend on social acceptance of the scientist's scheme of values? They are not widely accepted, these values. Can a pragmatic argument from the long-run value of knowledge to society be extended to cover particular instances like the present one? Under what limiting circumstances? Or is the scientist warranted in taking knowledge for its own sake as *his* absolute, pursuing fact and understanding wherever the law and social sanctions let him? In any case, the investigator bears a heavy responsibility, and he does



STANLEY SCHACHTER

well to weigh carefully the knowledge he hopes to gain.

In this connection one inevitably asks if there were not a variety of other research contexts available for testing the consonance-dissonance theory, contexts in which the ethical problem could have been avoided. The proselytizing hypothesis as a contribution to the theory of social movements is less vulnerable to this objection, and it is here, to be sure, that the authors place their emphasis. For the advancement of science, at any rate, it is probably fortunate that competent scientists of good will are willing to accept the kind of responsibility that Festinger, Riecken, and Schachter assumed. Whether they were justified in their decision will long be debated.

This is, in sum, a provocative book.

## Social Workers Think About Counseling

Herbert H. Aptekar

**The Dynamics of Casework and Counseling.** Boston: Houghton Mifflin, 1956. Pp. xvii + 257. \$3.75.

Reviewed by LEONA E. TYLER

*who is Professor of Psychology at the University of Oregon and is perhaps best known for her books, The Work of the Counselor and The Psychology of Human Differences, which has just gone into a revised edition (CP, 1956, 1, 302). She is president of the Oregon Psychological Association and will be of the Western Psychological Association by the time this is published. She is interested in children's interests and in the psychology of music and wants to be free to develop other very different interests.*

PSYCHOLOGISTS sometimes forget that they hold no monopoly on counseling activity. There are camp counselors, investment counselors, and counselors-at-law. Counseling is carried on in churches, travel agencies, and department stores. Social workers have come to consider counseling as one of their primary functions, and they, like the psychologists, have turned their attention to

a study of the process itself. This book constitutes one attempt to synthesize and interpret the thinking they have done. It is interesting to psychologists for several reasons.

First of all, it is useful to have a clear account of the diagnostic-functional split in the social-work profession, how it developed, and what relation it bears to Freudian and Rankian theory. Understanding this controversy is obviously of some practical value to psychologists who work with social workers oriented in one direction or the other. But more important is the fact that this analysis can enable psychologists to get a clearer view of some of the controversies that have arisen in their own profession. Social workers seem to have picked up different aspects of Freudian and Rankian theory from the ones that have been most influential in psychology and have thus come out with a different polarization of their thinking. Freudians, according to Aptekar, combine the collection of extensive information about a client's past life with passive 'client-centered' interviews. Rankians combine emphasis on the client's present situation with active interview methods leading in many cases to a struggle of wills. If we consider what looks at first glance like a parallel controversy in clinical psychology—the difference between therapists oriented toward Freud and toward Rogers—we realize immediately that psychologists have put the theoretical ingredients together in a different way. This is, of course, a simplified presentation of an issue that many social workers think Aptekar has already simplified too much, but it serves to point the moral: *Issues are not obvious.* Two professional groups can start with the same theories and develop quite different points of conflict between them.

The second contribution that Aptekar makes to the thinking psychologists are doing is his definition of *counseling*. He distinguishes it from casework, on the one hand, and psychotherapy, on the other. Casework focuses on a service, counseling on a problem, and therapy on personality change. He elaborates the casework-counseling distinction most fully, but it is the counseling-therapy differentiation that psychologists may wish to consider most carefully.

The third contribution the book makes is an analysis of the dynamics of the

counseling process itself. The author hopes that diagnostic and functional ideas can be synthesized if both groups make a searching study of the actual interaction between client and counselor. This discussion and the illustrative case can be very useful to counseling psychologists. At many points Aptekar's ideas are similar to those psychology has developed, but there are some interesting differences as well.

With so much common ground, both in the tasks that confront them and in the theoretical foundations of their ideas, it would seem to be very desirable for social workers and psychologists to pool their efforts. The approach through research, as recommended by Aptekar, may serve as a bridge between the professions. We can agree that this is the way in which differences can best be resolved. If more serviceable channels of communication can be worked out, all concerned should be able to advance more rapidly toward the common goals.

THE principal question that one must keep in mind as he reads Aptekar's book is whether it really represents the thinking of social workers as a whole. The five Freudian and the five Rankian concepts he singles out for discussion do not cover everything Freud and Rank had to say about personality or everything that social workers have drawn from these writers. Undoubtedly someone else faced with the task of selecting the five most important concepts from each theory would be likely to make a somewhat different selection. Many social workers of both schools, persons who have wrestled with the issues that divide them, are not convinced that the opposing theories can be reconciled. These are problems of great importance to members of the social-work profession.

Psychologists, however, allowing in their reading for some oversimplification, need not be too concerned about such criticisms. For them this book is a straightforward exposition of some ideas about counseling that they may be able to incorporate with their own. Let us have more of such presentations.



# Recent Russian Psychology: 1950-1956

By GREGORY RAZRAN

THIS review is named *Russian Psychology*, not *Soviet Psychology*, because it does not include publications in languages other than Russian—Ukrainian, Belyorussian, and Georgian. The publications in the first two languages were not available, and the reviewer does not read Georgian.

A list of the twenty books under consideration, divided into three categories, follows.

## A. Textbooks of General Psychology

1. V. A. ARTYOMOV. *Ocherk Psikhologii* (Outline of Psychology). Moscow: UCHPEDGIZ, 1954. Pp. 215. 4.45 rb. (25,000 copies.)
2. P. I. IVANOV. *Psikhologiya*. Moscow: UCHPEDGIZ, 1954. Pp. 376. 8.25 rb. (25,000 copies.)
3. P. A. RUDIK. *Psikhologiya*. Moscow: UCHPEDGIZ 1955. Pp. 428. 9.05 rb. (25,000 copies.)
4. T. G. YEGOROV. *Psikhologiya*. (2d ed.) [1st ed., 1952, unavailable.] Moscow: Ministry of Defence. Pp. 264. 6.15 rb. (25,000 copies.)
5. A. V. ZAPOROZHETS. *Psikhologiya*. (2d ed.) [1st ed., 1953, unavailable.] Moscow: UCHPEDGIZ, 1955. Pp. 188. 3.90 rb. (40,000 copies.)

## B. Symposia and Special Books

1. B. G. ANAN'YEV (Ed.). *Voprosy Det-skoy i Obshchey Psikhologii* (Problems of Child and General Psychology). Moscow: Akademiya Pedagogicheskikh Nauk, 1954. Pp. 203. 5.95 rb. (10,000 copies.)
2. E. V. GUR'YANOV and M. K. SHCHERBAK. *Psikhologiya i Metodika Obucheniya Pis'mu v Bukvarny Period* (Psychology and Methods of Teaching Writing in the Alphabetic Stage). Moscow: UCHPEDGIZ, 1952. Pp. 176. 2.40 rb. (25,000 copies.)
3. E. I. IGNATEV (Ed.). *Psikhologiya Risunka i Zhivopisi* (Psychology of Drawing and Painting). Moscow: Akademiya Pedagogicheskikh Nauk, 1954. Pp. 224-56. 12.45 rb. (2,500 copies.)
4. A. E. LEONT'YEV and L. I. BOZHOVICH (Eds.). *Ocherki Psikhologii Detei* (Outlines of the Psychology of Children). Moscow: Akademiya Pedagogicheskikh Nauk, 1950. Pp. 191. 3.50 rb. (10,000 copies.)

5. A. N. LEONT'YEV et al (Eds.). *Doklady na Soveshchaniyu po Voprosam Psikhologii* (Reports at the Conference on Problems of Psychology). Moscow: Akademiya Pedagogicheskikh Nauk, 1954. Pp. 348. 13.85 rb. (5,000 copies.)

6. A. R. LURIA. *Ocherki Psikhofiziologii Pis'ma* (Outlines of the Psychophysiology of Writing). Moscow: Akademiya Pedagogicheskikh Nauk, 1950. Pp. 84. 1.50 rb. (10,000 copies.)

7. A. R. LURIA and F. YA. YUDOVICH. *Rech' i Razvitiye Psikhicheskikh Protsesov u Rebyonka* (Speech and the Development of Psychic Processes in Children). Moscow: Akademiya Pedagogicheskikh Nauk, 1955. Pp. 94. 3.20 rb. (5,000 copies.)

8. N. A. MENCHINSKAYA. *Psikhologiya Obucheniya Aritmetiki* (Psychology of Teaching Arithmetic; 2d ed.) [1st ed. unavailable.] Moscow: UCHPEDGIZ, 1955. Pp. 348. 13.85 rb. (5,000 copies.)

9. A. TS. PUNI (Ed.). *Voprosy Psikhologii Sporta* (Problems of the Psychology of Sports). Moscow: Fizkultura i Sport, 1955. Pp. 272. 8.25 rb. (5,000 copies.)

10. E. B. RABKIN. *Polikhromaticheskiye Tablitsy dlya Issledovaniya Tsvetooschuscheniya* (Polychromatic Tables for Testing Color Sensitivity; 6th ed.). Moscow: Medgiz, 1954. Pp. 62 + xxv + v. 11.20 rb. (25,000 copies.)

11. P. M. YAKOBSON. *Psikhologiya Chuvstv* (Psychology of Feelings). Moscow: Akademiya Pedagogicheskikh Nauk, 1956. Pp. 238 + 32 photographs. 6.65 rb. (10,000 copies.)

12. T. G. YEGOROV. *Ocherki Psikhologii Obucheniya Detei Gramote* (Outlines of the Psychology of Teaching Children Literacy). Moscow: Akademiya Pedagogicheskikh Nauk, 1950. Pp. 106. 1.90 rb. (10,000 copies.)

13. A. V. ZAPOROZHETS and D. B. ELKONEN. *Voprosy Razvitiya Psikhiki Detei Doshkol'nogo Vozrasta* (Problems of Psychic Development of Pre-School Children). In *Izvestiya Akademii Pedagogicheskikh Nauk RSFSR*, 1955, No. 64. Pp. 1-192. 9.35 rb. (5,000 copies.)

14. V. I. ZYKOVA. *Ocherki Psikhologii Usvoyeniya Nachal'nykh Geometricheskikh Znaniy* (Outline of the Psychology of the Acquisition of Elementary Geometrical Knowledge). Moscow: UCHPEDGIZ, 1955. Pp. 164. 2.80 rb. (25,000 copies.)



Dr. Razran was born in Russia at the turn of the century, came to America a quarter-century later, and now for the last quarter-century has been at Columbia University and at Queens College in Flushing, New York, where he is professor of Psychology and Chairman of the Department of Psychology. He knows most of the Slavic, Romance and German languages (plus a few Semitic ones) and has for some years been one of American psychology's principal afferent channels for the Russian input. Nor is he complacent about America's ignorance of Russian psychology, psychophysiology and reflexology. At present he is writing a book on the Fundamentals of Conditioning and Learning, a book in which about a third of the sources cited are Russian.



### C. A Periodical

1. *Voprosy Psikhologii* (Problems of Psychology). Bimonthly. Nos. 1-6, 1955-1-4, 1956. Moscow: Akademiya Pedagogicheskikh Nauk. Editor: A. A. Smirnov. Deputy Editor: V. N. Kolbanovsky. Editorial Board: K. M. Kornilov, G. S. Kostyuk, A. N. Leont'yev, S. L. Rubinstein, A. R. Luria, and B. M. Teplov. 10.00 rb. each number. (3,000-5,500 copies.)

As far as the reviewer could ascertain, only two other textbooks of general psychology, unavailable for examination, have been published in Russian in the present decade. One is a new edition—four new editions, in fact—of B. M. Teplov's *Psikhologiya* (5th, 6th, 7th 8th editions: 1951, 1952, 1953, 1954), and the other is *Prospekt Uchebnika Psikhologii dlya Pedagogicheskikh Institutov* (Prospectus of a Textbook of Psychology for Pedagogical Institutes), 1953, which still may be in mimeographed form. On the other hand, the list of symposia and special books is, of course, but a sample, and the periodical is a population of one. There has not been a psychological periodical in Russian for a long time. *Psikhologiya* (1928-) *Sovetskaya Psikhotehnika* (1928-), and *Sovetskaya Psikhonevrologiya* (1925-) ceased publication in 1934-36, whereas several others were of even shorter duration and earlier demise. The average size of the Russian publications is, moreover, only about half the size of their American equivalents and, judging by Russian bibliographical sources, the population of the list of symposia and special books is not much larger than the sample under review.

THE reviewer thus feels that he should perhaps best begin with a problem of production, the simple question of why a country, whose enrollment in institutions of higher learning approaches that of the United States (1955: 1,867,000 vs. 2,721,000) and whose book production is several times higher (1955: 54,700 vs. 12,859), should show so meager a record of psychological publications. There is, moreover, the known fact that specifically scientific research and the training of technicians and scientists command a high priority in the Soviet system. Yet, with respect to psychology as such, it is



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the reviewer's estimate that all the research published and all the psychologists trained—the doctorates conferred—in the thirty-eight years of the Soviet era do not add up to several years' production in the United States, a disparity which should surely fill Americans with pride and allay their fears of being outdone, but which, nonetheless, is unexpected and demands explanation.

The explanation, however, is not far to seek and is simple to state. It is: (a) preemption of psychology by physiologists and to some extent by psychiatrists, inherited by Soviet Russia from Russia, and (b) interference by lay communists, a pure Soviet product. For reasons that need not be entered into here, Russian men of learning—of science, art, and the 'intelligentsia' in general—had become fond of psychologizing and psychologizing in physiological terms, almost from the very inception of their belated renaissance. One finds it in the writings of the essayists and philosophers Radishchev and Gertsen (1749-1801; 1812-1870), the literary critics Belinsky, Chernishevsky, and Pisarev (1811-1848; 1828-1879; 1840-1868), the pedagogue Ushinsky (1824-1870), the anatomist Lesgaft (1837-1809), the bacteriologist Mechnikov (Metchnikoff; 1845-1916), the botanist Timiryazev (1843-1920)—to name only prominent figures and to leave out for the present the physiologists and psychiatrists themselves.

Hollywood's *Ninotchka* may well have caught a true Russian *Geist*—a *Geist* that

Soviet writers label "indigenous Russian materialism" and that non-Soviet Russians resent. This reviewer is not frightened by the term *materialism* but he would certainly take exception to its being classed as "indigenous Russian" unless the phrase means merely that Russian intellectuals took their psychophysiology (materialism, for the sake of the argument) more seriously than colleagues in other ethnic groups. They did and still do.

At any rate, it is no wonder that even in the nineteenth century Russian physiologists and psychiatrists have preoccupied themselves with basic problems of psychology. Of the psychologizing psychiatrists, space permits mentioning only Korsakov (1829-1900) and his psychological laboratory, the first in Russia, Rossolimo (1860-1928) and his 'psychological profile,' and Sabler (1804-1872) and his motto: *Non morbum sed Petrum seu Paulum curamus* (we cure not disease but Peter or Paul). And of physiologists, there is the towering figure of Ivan Mikhailovich Sechenov, Honorary Member of the First International Congress of Psychology (1889), whose *Reflexes of the Brain* (1863), *Elements of Thought* (1873), *By Whom and How Should Psychology Be Studied* (1878), *The Doctrine of the 'Un-Freedom' of the Will* (1881), and several others are true psychological treatises of first magnitude and classics in any language.

What happened later in the twentieth century with Pavlov, Bekhterev, Beritov, and their followers hardly needs comment except for the following statement. Of the almost 1,100 Russian experiments in classical animal conditioning, not one was performed by a psychologist and only a few human conditioning studies have come out of psychological laboratories (almost all of recent vintage). Russian physiologists, moreover, engage also in a great many other types of psychological experimentation: like a number of American experimentalists, they use the term *conditioning*, particularly *verbal conditioning*, very loosely.

The second cause given for the shrinkage of Soviet psychology, interference by lay communists, also calls for some clarification. It does not refer here to the mere autochthonous adjustment of psychology to the communist philosophy of Marxism-Leninism—in 'localese,' "the

mastery of Marxist-Leninist Methodology"—which Soviet psychologists have been practicing painstakingly all along. Such 'adjustment and mastery' did, it is true, produce a lot of theoretic waste and pilpul (Chelpanov, in earlier days, even tried to 'Marxist-Leninize' Wundt and Titchener), but in itself, it did not reduce greatly the empirical and experimental investigatory scope of the field.

What did reduce psychological investigation, reduce it drastically, was the outright interference from the 'outside' and from 'above' by non-psychologists: specifically, (a) the 1936 decree on "pedological inversions" instigated by Zhdanov and excising from Soviet psychology the entire area of intelligence testing and indeed any kind of inter-individual psychometrics, and (b) the 1950 edict on "conversion to Pavlov" inspired by Stalin and decreeing that everything in psychology (and a number of other fields) must be unquestioningly aligned with what Pavlov said and meant.

It is difficult to compare these two 'invasions,' except to say that, while the first left in its wake widely gaping hollows, the second produced, at least at first, general impotence and confusion. For one thing, for some twenty years Soviet psychologists were told, and themselves seem to have concluded, that they must seek beyond—a great deal beyond—Pavlov, that indeed Pavlovianism in psychology is a Menshevistic or even a Trotskyistic tendency (1, 3, 5, 10). For another, the basic methodological and ontological implications of Pavlov and of Marx and Lenin are really quite disparate, not to mention the disparities between Pavlov and psychology of which no doubt a number of Soviet psychologists were cognizant. And above all, Soviet theorization does not permit innovation with respect to their classics of whom Pavlov is now one; one may not attempt to synthesize, let us say, Pavlov and Lenin by modifying in any way the views of either, but must adhere to orthodoxy, trying to prove that Lenin meant what Pavlov said and that Pavlov meant what Lenin said. Result: theological exegeses, quotations, and collations of texts rather than scientific analyses of facts and logic.

In short, if the reviewer be permitted a paradigm: Imagine an American psychology in which most of experimental

and clinical psychology were appropriated by some other science or sciences, with psychological measurement and most aspects of industrial and social psychology interdicted, and all the other psychologists told that they must follow Skinner or Hull (together with Marx, Engels, and Lenin, to be sure) or else—for that is approximately the state of affairs in current Soviet psychology. Yet such has been the resilience of their field that Soviet psychologists have managed, despite all, not only to survive but also to forge ahead and bring forth research and thought that, as will be seen later, well merit general interest. Let us look at the record and begin with the textbooks of general psychology which more than any other publications are in the Soviet Union, as might be suspected, matters of official sanction and approval.

#### TEXTBOOKS

PERHAPS the best way of conveying to English readers a first approximation of the nature of the Russian textbooks is to tabulate the authors they directly quote. Russian books teem as a rule with direct quotations and, moreover, follow the rule for placing references at the bottom of pages so that counting is easy. The number of references is substantial. Again, in order to enlarge the comparativeness of the tabulation and to impart to it a certain evolutionary-historical dimension, it seemed wise to include in it also two earlier productions:

a 1948 textbook by Kornilov, Smirnov, and Teplov (4) and a 1940 one by Rubinstein (9). The table thus presents a five-column breakdown of direct quotations in 1940–1955 Russian textbooks of general psychology—quotations from: (a) Pavlov; (b) Russian physiologists and psychologists other than Pavlov; (c) other Russians (primarily 'indigenous' nineteenth-century 'materialists' and leaders of the Soviet state); (d) Marx, Engels, Lenin, and Stalin; and (e) non-Russians other than Marx and Engels. (The Zaporozhets text is not included as, unlike the others, it is very elementary and with hardly any quotations).

The table is worth inspecting. First, there is the obvious high communality in the 1954–1955 books with respect to an abundance of direct quotations from Pavlov, ranging from 22.9 to 41.7 per cent of the total. But note that in the 1948 and 1940 textbooks the number of such quotations is wholly negligible: only 4 and 1. Secondly, there is the perfect unanimity among the current texts in possessing no quotations at all from non-Russian authors other than Marx and Engels, a unanimity that extends to the 1948 Kornilov book but not to the Rubinstein 1940 text, in which the non-Russian quotations make up 28.9 per cent of the total. (Almost all of them are psychologists, the top nine in the Name Index are: W. Stern, K. Bühler, Ebbinghaus, Freud, Helmholtz, Thorndike, James, Köhler, and Binet.) Thirdly, there is the very small number of quotations from Russian

DIRECT QUOTATIONS IN SIX RUSSIAN TEXTBOOKS OF GENERAL PSYCHOLOGY:  
FOUR PUBLISHED IN 1954–1955, ONE IN 1948 AND ONE IN 1940

Authors of Textbooks	Date Published	Authors Quoted and Distribution of Quotations Among Them									
		Pavlov		Other Russian psychologists & physiologists		Other Russians		Marx, Engels, Lenin, & Stalin		Non-Russians other than Marx & Engels	
		N	%	N	%	N	%	N	%	N	%
1. Artyomov	1954	30	41.7	4	5.6	9	12.5	29	40.3	0	0
2. Ivanov	1955	56	30.9	5	2.8	18	9.9	102	56.4	0	0
3. Rudik	1955	45	33.8	19*	14.3*	24	18.1	45	33.8	0	0
4. Yegorov	1955	19	22.9	6	7.2	14	16.9	44	53.0	0	0
5. Kornilov, Smirnov & Teplov	1948	4	3.9	0	0	7	6.9	91	89.2	0	0
6. Rubinstein	1940	1	.7	36	25.4	21	14.8	43	30.3	41	28.9

\*Only 5 quotations (3.8%) are from 20th-century Russian psychologists and physiologists; the remaining 14 (10.5%) are from Sechenov.

physiologists and psychologists other than Pavlov in the 1948–1955 books; and here, again, the Rubinstein book of 1940, with 36 or 25.1 per cent of such quotations, is in a class by itself. Finally, there is the agreement among all six books with respect to direct quotations from Marx, Engels, Lenin, and Stalin, and from Russians other than physiologists and psychologists, the combined percentages of which range from 45.1 in the Rubinstein text to the amazing proportion of 96.1 per cent in the 1948 text of Kornilov *et al.*

OR, to put it somewhat differently, the table shows (a) that the 1954–1955 Russian textbooks of general psychology are grounded in Pavlov, on the one hand, in Communist classics, on the other, and in nothing else; (b) that 1948 and, we might add, the late forties in general were a period in which psychology surely reached its nadir as an empirical science in the Soviet Union; and finally (c) that Rubinstein's book is the only one that is at all comparable with American and Western equivalents in source material and documentation. This book won the coveted Stalin (now Lenin) prize in 1942, which, however, did not prevent its reprobation and purgative treatment a few years later when xenophobic purification—'partyization' and Russification—of truth and science were decreed and effected. Indeed, even now when xenial relations are somewhat milder and 'partyization' less strangulatory, the book is still in limbo and by all tokens little in use as a teaching or research aid, even though Rubinstein himself, judging by his membership on the editorial board of *Voprosy*, must have been generally rehabilitated.

(Rubinstein's book was condemned in a period when charges of 'cosmopolitanism' were leveled in particular at intellectuals of Jewish origin. Soviet anti-Semitism, 'ethoscidal' rather than genocidal, began sometime in the late thirties and certainly grew to startling proportions in the last years of Stalin's life, nor has it disappeared even now. Three of the four Soviet delegates to the Ninth International Congress of Psychology (1929) were Jews, none of the seven delegates to the Fourteenth Congress (1954) were; but three of the eight members of the Editorial Board of *Voprosy* (1955) are of Jewish origin.)

#### THEORETICAL FRAMEWORK

As a second approximation of the nature of the 1954–1955 textbooks, we might take psychological categories treated or, roughly, the titles of the chapters. And here the English reader is in for another surprise. Despite the unmitigated Pavlovianization, the categories or chapters are almost identical with those in Russian B.C. (before conversion) books and, moreover, are much more like what one finds in Woodworth of 1921, Pillsbury of 1918, and even in Angell of 1908 and Höfding of 1891 than in modern American textbooks. All the five books have separate chapters on Attention, Will (Voluntary Processes in Rudik), Imagination, Sensation, Perception, Memory, Feelings (Emotions in Rudik), Speech, and Thought (the last two combined in one chapter in two books). None of the books has a special chapter on Conditioning; and only Rudik has one on Learning and Training. The remaining four content themselves with a chapter on Habit or on Habit and Action. There is, of course, no chapter on Intelligence, and only one book has a chapter on Abilities and Talents, a chapter in which mental testing is mentioned briefly as a to-be-shunned reactionary bourgeois technique. Nor is there a chapter on Motivation; this *pièce de résistance* in most American textbooks is hardly ever mentioned even as a mere concept or problem. On the other hand, all the books have a chapter on Personality (two chapters in Yegorov: Personality and Its Attributes, and Personality and the Collective) and a chapter on Physiological Foundations and the Development of the Psyche (*sic!*), primarily an exposition of Pavlovian doctrines. (Short sections on physiological foundations—that is to say, Pavlovian physiology—are also common in the other chapters.)

The conundrum thus becomes further enshrouded. (a) Why retain in full bloom the traditional categories in a Pavlovian psychology when Pavlov himself was so manifestly concerned with scrapping, not only the categories, but the whole of psychology as well? Then we ask: (b) Just how do Pavlovian principles account for the categories and what sort of theoretical framework is thereby erected? And finally: (c) What exactly is the nature of the actual

work of Soviet psychologists and how is this work in practice affected by the present framework? Recourse to sources more primary than the textbooks, namely, the Symposia and Special Books and the articles in the *Voprosy* (see the lists at the beginning of this article) is thus in order and it is best to take up the queries in sequence.

THE first query is in a large way the simplest as its answer indwells fully in the already-mentioned one word *Marxism-Leninism*. For while Marxism-Leninism—to anthropomorphize phrasal variations of a recurrent theme—loudly exults in the view that "the psyche is but an attribute of highly organized matter—the brain," it also insists that "the psyche is at that a true reflector of objective external reality," and that this reflecting and especially human reflecting, *consciousness* (if you please), though "secondary and derived in a cosmologic and genetic sense, is, nonetheless, a full-fledged ontologic reality, the 'within' categories of which must not be attrited by 'without' studies of brain action." The 'within' categories are both subjective and objective, subjective phenomenally and objective causally. And they are specifics, and, to boot, higher evolving specifics—ever becoming more revelatory of objective reality.

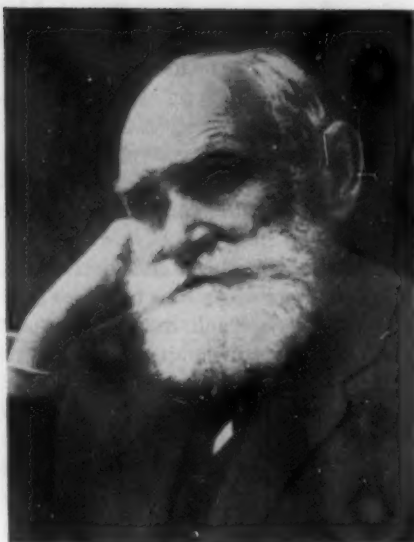
The unity of the brain and the psyche does not mean identity. Marx said: "even the poorest architect differs from the wisest bee in constructing a cell in his head before constructing it out of wax." Engels said: "Human interaction with nature comes to assume the character of premeditated acts directed towards the attainment of definite and anticipated goals." And Lenin said: "Human consciousness is not a passive mirror-like but an active participating type of reality-reflecting, a changing of the 'thing-in-itself' into the 'thing-for-us,' a powerful tool in transforming nature, man, and society." Nineteenth-century and early twentieth-century concepts of Purpose, Will, Imagination, and Consciousness itself are too inveterate in Communist ideology and propaganda for anyone to dare derange them. Moreover and more formally, Soviet theorists are militantly anti-positivist and anti-operationalist, eschewing needs for verifying over-all principles and for



coupling existents with operations. (Lenin's emphasis on "verification by praxis" is a form of pragmatism, not operationalism.)

Pavlov's thoughts on the matter were, of course, quite different. The very subtitle of the first of his three books on conditioning is *Twenty Years of Objective Study of the Higher Nervous Activity (Behavior)*. His 1906 Thomas Huxley Lecture is entitled *A Scientific Study of the So-called Psychic Processes of Animals*. (Note his use of the words *behavior* and *so-called*.) And in one of his last articles (1935) he explicitly stated: "The adjectives *higher nervous* correspond to the adjective *psychic*" (7, v. 3 [2], p. 294); and "What basis is there then to separate one from the other, to draw distinctions between what the physiologist calls temporary connections and the psychologist—an association? There is here a total blending, a total engulfing of one by the other, an identity" (*ibid.*, p. 325; obviously an engulfing of psychology by physiology). Then, in discussing Köhler's experiments and views, Pavlov further said: "You see, it seems as if he is now coming around to our point of view. Consciousness 'enthalt in sich keine besondere Kraft'" (6, v. 3, p. 20).

**S**OVJET theorists are known to be very adept in the 'reconciliation of opposites' by fiat and in explicative reversals under exigencies of the meanings of quotations—reversals of their own former explications. Moreover, although Pavlov is now canonized as a classic of dialectical materialism and the 'coryphaeus' of all animal and human sciences, American behaviorists continue to be denounced as 'vulgar' materialists and pseudo-scientists. Pavlov's argument with Guthrie, which clearly pertains to special aspects rather than to general systematic views, is repeatedly cited as evidence of his condemnation of bourgeois theories, whereas his tribute to Loeb, Beer, Bethe, and Uexküll, and particularly to Thorndike, (7, v. 3, pp. 18–20; v. 4, p. 20–21) and his frequent identification with behaviorists (7, v. 4, p. 22; 6, v. 3, pp. 16–20) are ignored. Indeed, one author, Menchinskaya (B8 in the list that heads this article, p. 15 and footnote) is highly



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indignant that the editors of Pavlov's posthumous *Collected Works* left without comment the tribute to Thorndike and to the "practical American mind." She does not suggest that the passage should have been deleted, merely that it should have been "appropriately" commented upon. "Pavlov in 1923 could not, naturally, have known what the practical American mind would turn out to be."

Two key Pavlovian concepts in the theoretical framework (our second query) of current Soviet psychology are (a) the second signal system and (b) the "dynamic stereotype" or "systematicity." Both concepts were put forward by Pavlov in his last years and the one on the second signal system he based, contrary to his custom, on general and clinical observations rather than experimentation, even though experimental evidence in the area was by that time available (in Ivanov-Smolensky's laboratory and in the studies of some Bekhterev's followers).

The concept of the second signal system is that of verbal conditioning, postulated as a special kind of conditioning rather than just conditioning to another kind of stimulus. A word, says Pavlov, is by its very nature an abstraction or generalization, and its conditioning is a "signal of signals," to which Soviet psychologists dutifully add a quotation from Lenin that "sensations and feelings reveal the real, and words and thoughts the general."

The concept of the "dynamic stereo-

type" is, on the other hand, fully grounded in experiments covering the factual generalization that ordered groups of conditioned stimuli come to affect significantly and radically the course of later conditioning. This concept is really quite similar to Harlow's *learning sets* and to the reviewer's *attitudes*, though Pavlov himself seems to have preferred to think of it as a counterpart of *Gestalten*. In his own words, "'dynamic stereotypes' prove that associations generate [and govern] *Gestalten* and not *Gestalten* . . . associations" (6, v. 3, p. 46).

Now, when these two Pavlovian concepts are combined with his more familiar ones and garnished with some 'accepted' exegeses and extensions, the following framework seems to be realized.

(a) Classical conditioning in general—that is to say, conditioning of the first signal system—is the most universal and functionally exclusive principle of animal and human modifiability, modifying effectively and radically all reactions from the very simplest viscerovisceral reflexes to the most complex human values and judgments which, too, must be conceived reflexively. Except for *innervation* the Russian concept of the reflex is really not much different from that of Skinner.

(b) Classical conditioning is in itself a psychic act, inasmuch as it enables a fuller reflection of reality and thus a better adjustment to it, and inasmuch as at higher levels it correlates with and gives rise to conscious perceptions and images.

(c) A large portion of conditioning, especially that of interoceptive conditioning, is, though psychic, unconscious in essence, and this unconscious conditioning is all there is to the bourgeois concept of unconscious motivation and psychosomatic effects and actions.

(d) Conditioning of the second signal system and its interaction with that of the first is the basis of human thinking and of other higher mental processes. The Marxist-Leninist turn here is that both "higher mental processes and speech evolved in the course of man's changing the environment through work" (tool using and production).

(e) In the interaction between the second and the first signal systems, the second system typically dominates and directs but it is the first that is basic and real; the second system alone lacks reality

and reference, even as the first alone is devoid of human content and power.

(f) The manner of the interaction between the first and second signal systems and the relative role of each in concrete social-historical situations determine both the general type and the specific characteristics of the personality of each individual.

(g) With the exception of lower organisms, all conditioning involves cortical action and the operation of the specific cortical mechanisms of excitation, inhibition, irradiation, and induction; but the absolute and relative roles of the specific mechanisms vary considerably among various types of conditioning, various individuals of the same species, and various species.

IMPRESSIVE as the framework may appear, it must be said that to a large extent it is merely programmatic, with but little experimental anchoring and validation. Even the very superiority of second-signal over first-signal conditioning has hardly been worked out specifically in Russian laboratories with respect to such specific characteristics of the conditioned reflex as extinction, generalization, chaining, patternization, intensive and temporal relations. Nor has there been a significant utilization of such key findings as sensory conditioning, sensory pre-conditioning, equivalence of psychophysical and conditioned-reflex thresholds, perception through conditioning. Likewise, a concept like semantic conditioning, that might link conditioning to thinking, is wholly ignored, for semantics in general is condemned as a reactionary doctrine related to *positivism* and the teachings of Mach against whom Lenin inveighed long ago (in his *Materialism and Empiricocriticism*). Similarly condemned are the significant innovations of the Soviets' own leading psychophysiologists—Beritov, Orbeli, Kupalov, and Anokhin (14; Anokhin's *functional system* is particularly interesting). So, current Soviet psychology is Pavlovian, not in the sense of being based upon what Pavlov did and stimulated others to do—that is to say, upon a broad critical evaluation of experimental evidence of classical conditioning—but in the sense of conforming with what Pavlov actually said and what the 'ins' in the system think he said. Modifications and revisions of the established views are not

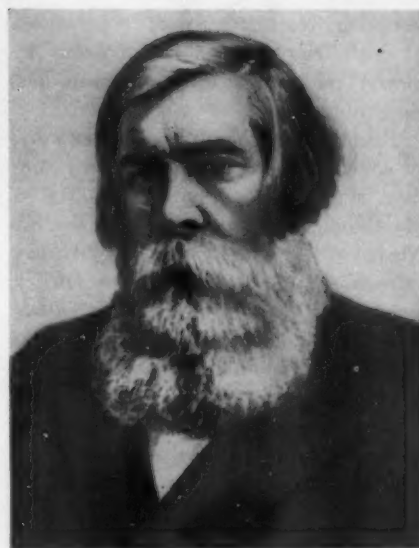
tolerated despite the glaring fact that by now post-Pavlovian evidence on conditioning exceeds that which was produced during Pavlov's lifetime. Like Marx, Engels, Lenin, and until recently Stalin, Pavlov is now a Soviet classic above criticism and impugnation—a dogma such as Pavlov himself, the empiricist, fought all his life.

Nevertheless when one gets away from the Procrustean beds of Soviet psychological theory and considers the actual work that Russian psychologists are doing (our third and final query), the picture looks considerably brighter and milder. Indeed, except for the drastic curtailment of scope—no psychometrics, no attitude studies and social-industrial psychology in general, and little interest in mental health and motivation—Soviet psychologists' methods, designs, and even specific interpretations differ but little from their American equivalents, and the very curtailment of scope imparts to their work an experimental and systematic air. Since space forbids a detailed examination, the reviewer compresses the material under these three headings: *conditioning and methodology, complex learning and applied psychology, and other topics*.

#### CONDITIONING AND METHODOLOGY

SOVIET psychologists do not experiment—and have not experimented for a long time—with animals. Their standard subjects are children and occasionally young adults and their area of conditioning is verbal conditioning in which they have already manifested considerably greater ingenuity than the experimenters in the laboratory of the physiologist and psychiatrist, Ivanov-Smolensky.

Two experiments, both by Elkin, will be cited. In one with school children, (B5 in the list, *supra*) the efficacy of shock conditioning to an illuminated hexagon inscribed in a circle and the generalization of the conditioning to related stimuli, like a circle in a hexagon and a pentagon in a circle, was compared with the children's correct naming of the conditioned figure in the conditioning tests and with their reported imagery of the original conditioned stimulus in the generalization tests. The results were positive in both cases; that is to say, conditioning was most frequent in trials in which the children named correctly the hexagon-in-



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circle and generalization was most frequent in trials in which the presentation of the generalization stimuli was accompanied by a reported image of it.

In the other experiment (2), Elkin studied the transfer of shock conditioning in 30 college students from sentences to the word-components of the sentences. Three sentences were used: "Vklyuchayu tok" (I am switching on / the shock), "Rukopis' pročitana" (The manuscript / was read), and "Student vyderzhal ekzamen" (The student / passed / the examination). (The bars in the parentheses mark off the equivalents of each Russian word). It was found that transfer was highest in the first sentence and lowest in the second, with about equal distribution between individual words in each case; while in the third sentence the word *vyderzhal* (passed) was the highest, *student* lowest, and *ekzamen* (examination) occupied an intermediate position. The results are interpreted in terms of total or sentential meaning-load carried by separate words; that is to say, the nature of the words in the sentences was such that the total meaning of the first sentence was implied in each of its two words, that of the second in neither word, and that of the third was unevenly distributed.

The cited experiments—and more could be added, such as those relating perception to investigatory reflexes on the one hand and to mental sets on the other—obviously show that in practice the methodology of present-day Soviet psychology is by no means one of muscle-

twitchings and gland-oozings but is quite comprehensive, combining, as it were, Pavlovian *von unten herauf* with traditional psychological *von oben herab*. There is, however, one glaring elementary shortcoming in the methods that needs to be pointed out, and that is the very poor statistical treatment of data. This shortcoming is also common to Soviet physiologists; but there at least objective records of response are as a rule available whereas the psychologists' data are often just sets of raw figures. The shortcoming should not be difficult to overcome in view of the highly developed level of Soviet mathematics and statistics as such.

#### COMPLEX LEARNING AND APPLIED PSYCHOLOGY

SOVIET applied psychology is now largely applied educational psychology dealing with problems of concrete learning and training, problems in which life situations and laboratory studies are closely intertwined. Views that real life transcends in some way laboratory potential are decried as the last remnants of idealism and religion, with the result that the applied psychologists really differ but little from the laboratory experimentalists, particularly now when everything transformable in men and animals—from apiculture to philosophy and from ovulation and immunity to sports and psychiatry—has been officially declared within the reach of Pavlovian treatments. Hence, a book like Menchinskaya's *Methods of Teaching Arithmetic* (B8 in the list) while containing an abundance of pedagogical material on the mastery of the subject by school children, is, nonetheless, thoroughly steeped in laboratory experiments and in theoretical disputations about learning theory with the details of which the author is surely more familiar—and more sophisticatedly familiar—than any American educator or educational psychologist. Menchinskaya's thesis seems to pivot on proving that Pavlov's view of connection-forming is superior to that of Thorndike's, and, interestingly enough, she does not juxtapose the two along the customary lines of reward vs. contiguity. Rather, her arguments are that Thorndike's associationism is (a) static, lacking the dynamic plasticity of Pavlov's extinction, inhibition, and induction, (b) elementaristic,

not having the concept of the "dynamic stereotype" (supra), and (c) vulgarly materialistic, not distinguishing between conditioning of the first and the second signal system.

The symposium on *Problems of the Psychology of Sports* (B9 in the list), edited by Puni, is another pertinent example. The book consists of seven articles on high-vaulting, skiing (slalom), tennis, track-and-field running, and general gymnastics—and each article is a report of a thoroughly controlled experiment with a large number of subjects, plus a highly integrated theoretical discussion of learning theory, habit formation, perception, and voluntary action. Puni writes the summary. Basing his discussion upon an analysis of the data of the symposium and quoting Sechenov that "the more practiced a movement the more it becomes subject to the will," Puni argues rather convincingly and sophisticatedly that habits are the most voluntary and thus the most cognitive components of man's activities, that habit facility must by no means be confused with reflex (unconditioned) facility, or automation of details with automation of total acts, that assertions about practice tending to telescope neural loci are wholly unfounded, and that in general the normal dynamics of psychological accretions proceed from lower to higher categories and not vice versa. Puni's views are obviously not unrelated to those of the Würzburg school and to Titchener's 'meaning core,' except that, among other things, Puni rests his arguments largely upon behavioral-objective criteria: plasticity, controllability, sensitivity to error, correspondence to concrete objective situations, etc. Yet it must be remembered that, in Soviet psychology, consciousness is not out of fashion and by no means is it in the process of being replaced by operational substitutes (Boring's expression); it, too, is usually consulted and given some power of arbitration with respect to itself. Will and imagination, the reviewer is tempted to continue, are in Soviet theory not the same as heat and light (Boring again).

At any rate, this Puni symposium—the individual parts of which cannot, unfortunately, be considered—surely illustrates well a successful applied-theoretical synthesis in an area in which, judging by the special conference on the psychology

of sports held in January of 1956, Soviet psychologists have shown much interest and in which Americans have done so little. As is known, Soviet physical education is of a high caliber and their Olympic contestants have come off with a goodly number of high honors—for which, perhaps, their psychologists may claim some credit.

#### OTHER TOPICS

OF the 31 summary reports (all experimental) read at the 1953 All-Union Conference, 12 were in the area of thinking. Perception and speech (language) dominated the reports of the 1955 All-Union Conference, while two special conferences, one on personality and one on perception of speech, were held in 1956. (The reviewer has no information about any other conferences of Soviet psychologists since 1950, except that the 1955 All-Union Conference is called the third, the conference on perception of speech is called the Fifth Conference on the Study of Speech, and that a conference on the psychology of sports was held in January of 1956.)

These topics are also represented in a major way in published reports, of which, unfortunately, only a small number can be touched upon. There is, for instance, the experiment by Leont'yev (B5 in the list) on joining four points in a square by three straight lines, an experiment in which no differences in solutions were found by having subjects execute the correct movements in pre-solution periods through chess games. Then, there are Luria's comparative studies on parallel development of speech and thought in normal and subnormal children (B5) and in identical twins before and after differential speech training (B7), as well as his finding that brain-injured bilingual—Russian and French—patients showed differences in retention and recovery of ability to write in the two languages, a finding which Luria attributes to the fact that Russian is a phonetic language and French is not. Note should also be taken of the impressive symposium edited by Ignatev on imagery in drawing and painting (B3), studies combining exhaustive questionings of children and professional artists with analyses of famous Russian paintings, of Sokolov's careful experimentation and theorization on the



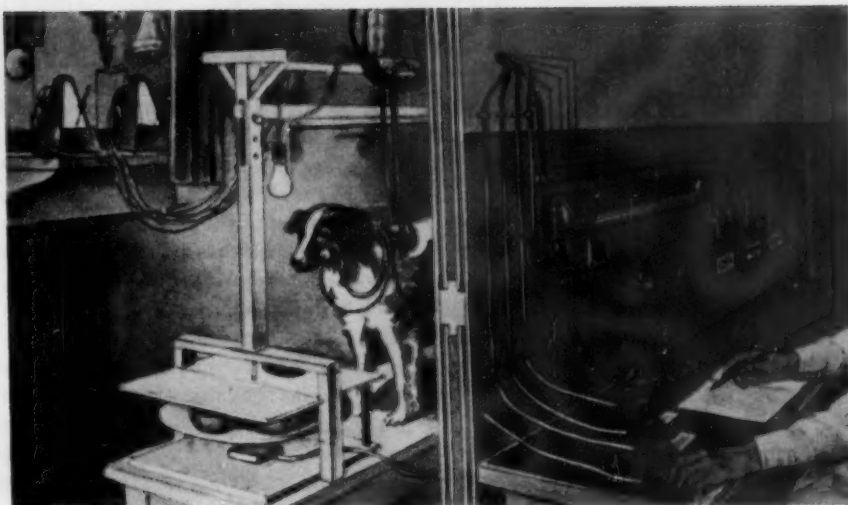
relation of perception to investigatory reflexes (11), and of the series of studies and discussions of attitudes by the Georgian psychologists (12).

Certainly non-conditioning or non-learning categories are not being liquidated in Soviet psychology. Moreover, formal lip service to the contrary, these categories are in reality conceived autochthonously and not linked systematically in an integrated Pavlovian matrix. Pavlov's objective of engulfing psychology is not being realized in the Soviet Union, not because it cannot be done but because Soviet psychologists are not doing it. And they are not doing it because of non-empirical and thus non-Pavlovian impositions of prevalent Soviet philosophy. Indeed, in a real sense Pavlov's spirit and intent live on much more in American psychology, at least in a respectable portion of it, than in the official Pavlovian psychology of the U.S.S.R.

#### SUMMARY

To sum up. Until very recently Russian psychology as such (that is to say disregarding psychological contributions of Russian physiologists) has for some eighteen years been in a state of decline. Its experimental research and systematic thoughts have been at a minimum and its chief preoccupation seemingly has lain in denouncing 'bourgeois' psychology and in remonstrating, one psychologist with another, in matters of Marxist-Leninist purity. Russian psychology had, in all the eighteen years, no periodical of its own and its only significant book, that of Rubinstein, was severely condemned a few years after its publication. The *Great Soviet Encyclopedia* devoted 18.5 pages to the entry *Psychology* in its first, 1940, edition; but only 5.0 pages in its second, 1954, edition (13, vols. 47 and 35). *Psychoanalysis* commanded 3.5 columns in the first and less than 0.5 of a column in the second edition.

In 1950, the Soviet Academy of Sciences, in joint session with the Soviet Academy of Medical Sciences, resolved that Soviet psychology, among a number of other fields, should be reconstructed on the basis of the Pavlov teachings. At first, this 'suggested' reconstruction accomplished but little, partly because Soviet psychologists were not sufficiently familiar with the work of Pavlov and his students, partly because for a number of



A CROSS SECTION OF THE CHAMBER FOR STUDYING CONDITIONED REFLEXES. On the left, the interior part of the chamber; on the right, the exterior part.

years Pavlovianism was considered by Soviet theorists unsuited and even harmful for psychology, and partly because the task itself is difficult. In time, however, the reconstruction took some root and there is no doubt that since about 1953 Soviet psychology has been proliferating. Presumably, a psychology with Pavlov in it, even if it has to have also Marx, Engels, and Lenin, is better off than one with Marx, Engels, and Lenin alone. Or we might say that Soviet psychology had at last found an officially sanctioned and befittingly glorified empirical-experimental framework within which it can operate with a wide margin of safety. Unfortunately, however, the posthumous framework has lost a great deal of its original Pavlovian plasticity, becoming more a code of closed dogmas than a set of open hypotheses. Thus Soviet psychology still misses full freedom of inquiry and interpretation without which no science merits its name.

AND lest these sentiments be attributed merely to a capitalist psychologist, the reviewer quotes a letter written by Pavlov on April 5, 1914, to the psychologist Chelpanov on the occasion of the opening of the Moscow Institute of Psychology. The letter reads: "After science's splendid triumphs over the inanimate world comes the turn to decipher animate nature and in it nature's crowning achievement—the action of the brain. The task in this area is so inexpressibly

vast and complex that it calls for all resources of human thought: *absolute freedom, total disavowal of stereotypy* ('shablony'), *all possible diversities of points of view and means of attack* [methods], etc., *in order to insure success*" (8, pp. 99–100; ital. mine). Surely, American psychologists will wholeheartedly subscribe to Pavlov's statement, but will Soviet psychologists and the Soviet State do it, too? The reviewer hopes that they eventually will.

#### REFERENCES

1. BELYAYEV, B. V. [The beginning of the end of Reflexology.] *Psikhol.*, 1930, 3, 134–144.
2. ELKIN, D. G. [Characteristics of a conditioned reflex to a complex verbal stimulus.] *Vopr. Psikhol.*, 1955, 1(4), 79–89.
3. FRANKFURT, YU. V. [*Reflexology and Marxism*.] Moscow: GIZ, 1926.
4. KORNILOV, K. N., A. A. SMIRNOV, & B. M. TEPULOV (Eds.). *Psikhologiya*. Moscow: UCHPEDGIZ, 1948.
5. KORNILOV, K. N., & YU. V. FRANKFURT. [Objective or Marxist Trends in Psychology.] *Vest. Komm. Akad.*, 1929, 35–36, 181–204.
6. PAVLOV, I. P. [*Pavlov's Wednesday Seminars*.] Moscow: Akad. Nauk, 1949. 3 vols.
7. PAVLOV, I. P. [*Collected Works*.] Moscow: Akad. Nauk, 1951. 5 vols.
8. PAVLOV, I. P. [Letter to G. I. Chelpanov.] *Vopr. Psikhol.*, 1955, 1(1), 99–100.
9. RUBINSTEIN, S. L. [*Principles of general psychology*.] Moscow: UCHPEDGIZ, 1940.

10. SHEMYAKIN, F. & L. GERSHONOVICH. [How Trotsky and Kautsky revise Marxism in Psychology.] *Psikhol.* 1932, 1-2, 3-37.
11. SOKOLOV, E. N. [Higher nervous activity and the problem of perception.] *Vopr. Psikhol.*, 1955, 1(1), 58-69.
12. [Discussions of reports on problems of attitudes at the 1955 Conference on Psychology.] *Vopr. Psikhol.*, 1955, 1(6), 72-112.
13. [Psychology.] In *Great Soviet Encyclopedia*. Moscow: GIZ, 1st ed., 1940, v. 47; 2d ed., 1954, v. 35.
14. [Scientific sessions on the problems of the physiological teachings of Academician I. P. Pavlov] June 28-July 4, 1950 Moscow: Akad. Nauk, 1950.

## Les Mots Justes

### Centre National de Documentation Pédagogique

**Le français élémentaire.** Paris: Centre National de Documentation Pédagogique, 1955. Pp. 68. 150 fr.

**G. Gougenheim, P. Rivenc, R. Michéa, and A. Sauvageot**

**L'élaboration du français élémentaire: étude sur l'établissement d'un vocabulaire et d'une grammaire de base.** Paris: Didier, 1956. Pp. 256. 1450 fr.

Reviewed by MARK R. ROSENZWEIG

who is Associate Professor of Psychology at the University of California in Berkeley. He is a physiological psychologist, an expert on brain processes, but he also gives a course in the psychology of speech and communication and recently spent a sabbatical term in the Laboratoire de Psychologie Expérimentale at the Sorbonne in Paris, where he worked on verbal behavior.

IN 1947 a committee of UNESCO urged that languages be adapted for rapid instruction of people in underdeveloped regions. French authorities decided to prepare an Elementary French and established a committee for this purpose in 1951. Working rapidly, the committee published the basic vocabulary and grammar, *Le français élémentaire*, in 1955. The fuller text, *L'élaboration du français élémentaire*, presents

the problems, methods, and results in considerable detail, and it compares this with other attempts to prepare basic languages. This example of language engineering will be of general interest to students of psycholinguistics and communication.

The French committee decided against a closed system like Basic English, in which everything (theoretically) can be said by means of the reduced vocabulary, but in which the result is sometimes quite unlike common English. Instead they favored an open but simplified system in which all the forms would be correct idiomatic French. They also decided to base the simplification upon empirical studies of language usage rather than solely upon the opinions of experts, noting that experts fail to agree on such questions. Oral usage was taken as the basis, since the ability to speak was considered primary and since elementary language instruction is largely oral. To determine usage accurately, tape recordings were made of 163 conversations—312,135 running words—with some attempt being made at representativeness of speakers and topics. Each word and grammatical form was tabulated. This appears to be the first large-scale study of vocabulary and grammar in conversation.

The basic vocabulary of 1374 words was chosen according to three criteria:

(1) Frequency of usage, tempered by (2) "rational empiricism." Two tables in the text give the frequency and rank of the 1063 most frequent words, one table in rank-order and the other in alphabetical order. (The authors note that this list seems short compared to various lists of written frequency but that it is sufficiently long for their purposes. They also state that the complete tabulation of 8000 words may be consulted at the Centre d'Étude du Français Élémentaire, at the École Normale Supérieure, Saint-Cloud; and this reviewer can testify to the generous help that a visiting researcher receives there.) The 800 most frequent words were first selected, and about 100 of these were eliminated as being synonyms of more frequent words, as colloquialisms, or as being unsuitable for other reasons. In keeping with the educational purpose, some words were added in areas such as hygiene, art, science, and civics.

(3) 'Availability.' Many words that are well known are nevertheless not frequently used. Most of these designate common objects such as shirt, tooth, and fork—objects that we see more frequently than we name. To determine the 'availability' of such terms, students in several regions of France were asked to list the 20 nouns they considered most useful to know in relation to each of 16 different fields such as furniture, clothing, and transportation. The results for several fields are given, along with comparisons between responses of boys and girls and of urban and rural students. In each field there was considerable consensus, and the most available words were included in the basic vocabulary. Available verbs were also added to the list.

The grammar of Elementary French, like the vocabulary, was based largely on statistical studies of usage in the recorded conversations. In *Le français élémentaire* 14 brief pages suffice to outline basic French grammar, and this includes examples, some indications of order of presentation, and statements of what should *not* be taught.

The last chapter of *L'élaboration du français élémentaire* presents attempts to determine how much of ordinary French texts can be understood by a reader who knows only Elementary French. While three-quarters of the words in newspaper articles are included in the basic vocabulary, many of these are grammatical words (articles, pronouns, auxiliary verbs, etc.). If grammatical words are excluded from consideration, less than half the words in the newspaper articles are covered by the basic vocabulary. Special texts must therefore be prepared for the person who knows only Elementary French, and examples are given of rewriting texts in Elementary French.

Elementary French is certain to have a profound effect on the teaching of French. It is already being used in several European and Asian countries and among North Africans residing in France. Its example will undoubtedly affect the teaching of other languages as well. As a by-product of this pedagogical enterprise, we have the extensive statistical studies on which Elementary French is based. These studies provide a wealth of material for further linguistic and psycholinguistic research.

# Statistics Distribution-Free

Sidney Siegel

**Nonparametric Statistics for the Behavioral Sciences.** New York: McGraw-Hill, 1956. Pp. xvii + 312. \$6.50.

Reviewed by ALLEN L. EDWARDS

Dr. Edwards is Professor of Psychology at the University of Washington in Seattle. He is well known for his contributions to experimental design, statistical method, and psychological measurement, and thus to social psychology and the psychology of personality. In these fields he has published several books of which the latest is *Statistical Methods for the Behavioral Sciences* (1954).

A REVIEW by Moses (1952) in the *Psychological Bulletin* was the first article addressed specifically to psychologists calling their attention to nonparametric tests of significance. Subsequently, Smith (1953), Mosteller and Bush (1954), and Blum and Fattu (1954) have dealt with the use of nonparametric methods in psychological research. Since these brief treatments have appeared, a number of recent statistical books, written for the behavioral scientist, have also included discussions of nonparametric tests.

Now, however, for the first time, the psychologist has available in Siegel's book one that is concerned solely with nonparametric methods. The book is well written, attractively designed, and a distinctive addition to the McGraw-Hill Series in Psychology. It is also a valuable contribution to psychology and deserves a place in every research worker's library. Not only does Siegel illustrate a wide variety of nonparametric methods, he also includes in his text tables of significance-values useful in evaluating the results of nonparametric tests. These tables are widely scattered in the statistical literature and it is good to have them available within the pages of a single volume.

What is a *nonparametric* or *distribution-free* test? (Siegel uses the two terms interchangeably.) We can perhaps best answer this question by first considering a familiar parametric test—the *t* test for the significance of the difference between the means of two samples.

In Fisher's sense, it can be said that *t* tests the null hypothesis that the

observations in the two samples have been independently and randomly drawn from identical normal populations. If the test of significance results in the rejection of the null hypothesis, we say that we accept an alternative hypothesis. In this instance, the alternative hypothesis is simply that the two samples have *not* been independently and randomly drawn from identical normal populations.

Rejection of the null hypothesis thus implies that any one or a combination of the following *may* be true: (1) the observations are not independent and random; (2) the populations are not normal; (3) the population variances differ; (4) the population means differ. Since our interest in experimental work most frequently concerns only the possibility that (4) may be true, mere rejection of the null hypothesis is not very satisfying unless we can, at the same time, conclude that (1), (2), and (3) are false.

IN GENERAL, we attempt to rule out the possibility that (1) may be true in terms of our experimental procedure. We usually *assume* that (2) is false because of our faith (?) that psychological measures are normally distributed. If we are concerned about (3) being true, we may test the specific null hypothesis that  $\sigma_1^2 = \sigma_2^2$ , assuming that (1) and (2) are false. If the results of this test are satisfactory, and with the assumption that (1) and (2) have been ruled false, we are left with (4). This is what we want to be left with and we frequently manage, by one means or another, to get what we want. Even if the result of testing the variances for homogeneity is unsatisfactory, we may find that a transformation of scale enables us to conclude that (3) is false on the transformed scale, whereas (4) is true.

In essence, if we have successfully ruled (1), (2), and (3) as false, then the null hypothesis tested concerns only a comparison of the estimates of the parameters  $\mu_1$  and  $\mu_2$ , the two population means. The

*t* test (and other parametric and nonparametric tests) may still be useful, however, in the sense of resulting in a meaningful statement about the difference between the parameters of interest, despite the fact that the data being evaluated do not conform completely to the statistical model. This is to say, in the case of the *t* test, that even though (2) or (3) may be true, we will not necessarily be in error in concluding that (4) is also true.

If one examines the various tests of significance that have been called nonparametric or distribution-free, for the two-sample case, one finds that a common denominator of these tests is that they do not specify a particular form for the populations sampled, other than to assume that they are identical and, in frequent cases, continuous. Thus, the term *distribution-free tests* or, perhaps more appropriately, as Lubin has suggested, *normal distribution-free tests*. A second characteristic of these tests appears to be that they do not involve the *estimation* of parameter values of a distribution function from the sample observations under consideration. This characteristic has also been used to define the tests as nonparametric.

Siegel's definition of a nonparametric test is that it is one whose model does not specify conditions about the parameters of the populations from which the samples were drawn. Yet, other than not restricting the test to samples drawn from identical *normal* populations, many of the tests called nonparametric have exactly the same assumptions as the *t* test. This is true, for example, of the *H* test and various other ranking tests. As a test of the significance of the difference between two means, the *H* test *assumes* equivalence of all other irrelevant parameters, that is to say, those in which we are not interested. The null hypothesis tested by the *H* test is that the two samples have drawn from identical populations. Insert *normal* after *identical* and we have the null hypothesis of the *t* test.

The implication of the above discussion is worth emphasizing since it might be believed that a violation of the assumptions involved in the *t* test can be corrected for automatically by substituting a nonparametric ranking test for the *t* test. This is not necessarily true. The ranking test is appropriate only if the population distributions are not normal,





SIDNEY SIEGEL

but are *identical* in all other respects. If the populations differ with respect to higher moments, the ranking test is no more appropriate than the *t* test, if our interest lies in the difference between the means. It can be shown, for example, that if the populations differ with respect to irrelevant parameters, a significant value of *H* can be obtained, even though the two sample means have exactly the same value.

As in the case of the *t* test, however, some relaxation of the assumption of identical populations can be made for the *H* test. Kruskal and Wallis, for example, indicate that the *H* test is relatively insensitive to differences in variances, if the population distributions are both symmetrical.

The main thing that can be said in favor of the normal distribution-free tests as *substitutes* for the *t* test is that we can get away from the assumption that the samples were drawn from identical normal populations. The new assumption we make of sampling from identical non-normal populations is obviously a less restrictive condition for our test of significance.

Even less restrictive, of course, would be a test of significance which is sensitive only to a difference in the parameters of experimental interest and which does not assume equivalence of all other irrelevant parameters. Such a test would be not only normal distribution-free, but truly distribution-free. If we shift our interest from means to medians, we have a test of this kind in the median test. The

median test does not assume that the two samples have been drawn from identical populations. The null hypothesis is that the samples have been drawn from populations with a common median. If this hypothesis is rejected, we can conclude that the population medians differ irrespective of any differences that may exist between other irrelevant parameters.

If the conditions of normality and equivalence of variances in the *t* test can be relaxed, why then should one be interested in a nonparametric test? A strong argument advanced by Siegel in favor of the nonparametric tests involves the kind of assumption we can make about psychological measurements. If we ignore the problem of normality of distribution, how strong are psychological

measurements? Siegel contends that the typical measurements made in psychology do not exceed those of an ordinal scale. We aspire to interval scales, he states, and on infrequent occasions we succeed. Yet, the arithmetic operations involved in calculating means and variances involve the assumption that our measurements fall on an interval scale.

Thus, one can argue, as Siegel does, that in using the *t* test, an additional assumption about the strength of our measurements is involved. If this assumption is not tenable, then we have no recourse other than to use those tests of significance which do not assume anything stronger than a nominal or ordinal scale of measurement. These tests, of course, are the nonparametric tests.

## Nurture, Nature, and Ethology

W. H. Thorpe

**Learning and Instinct in Animals.** Cambridge, Mass.: Harvard University Press, 1956. Pp. viii + 493. \$10.00.

Reviewed by DANIEL S. LEHRMAN

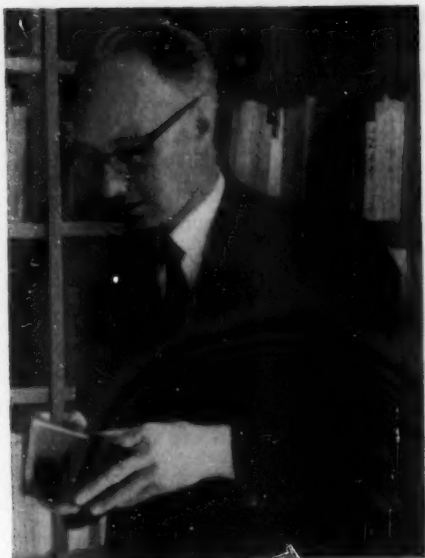
*Dr. Lehrman is Associate Professor of Psychology at Rutgers University, is a bird-ethologist and, more particularly, a ring-dove ethologist. It was Lorenz's papers that got him started on this tack when he was a college sophomore. He knows the ethologists, has been out 'birding' with Thorpe whose conceptions he has criticized even before he wrote this review. He is trying mainly to analyze the psychobiology of avian behavior that seems to be 'instinctive.'*

**I**N its younger days, comparative psychology in the United States had strong affinities with biology and with the naturalist's manner of looking at animal behavior. The files of the *Journal of Animal Behavior*, *Psychobiology*, and the early *Journal of Comparative Neurology* and *Journal of Comparative Psychology* show how biologists and psychologists shared similar approaches to the problems of behavior. More recently, however, the study of animals by American psychologists has tended to become divorced from the analysis of naturally occurring behavior patterns and to be more and more identified as the use of animal subjects for the laboratory investigation of problems

of 'general' psychology, like learning, perception, motivation, and brain function.

Meanwhile biologists, especially in Europe, have expanded their lively interest in animal behavior. There a flourishing school of comparative behavior studies, under the name of *ethology*, represents a major activity in university departments of zoology and produces three important journals, *Behaviour*, *Zeitschrift für Tierpsychologie*, and the *British Journal of Animal Behaviour*, as well as strongly influencing several others. The point of view of comparative ethology is best expressed in several papers published in German journals between 1935 and 1941 by K. Z. Lorenz, and in N. Tinbergen's book in 1951, *The Study of Instinct*.

Ethological research has been largely oriented to the study of 'instinctive' behavior. Lorenz developed an instinct theory which provided a congenial framework for the organization of many types of observation by workers in zoos, in laboratories, and in the field, and Tinbergen has stated that the analysis of 'innate' behavior is a natural prerequisite



W. H. THORPE

to the study of any other. One major ethologist who is primarily concerned with the understanding of learning and the relationship between learned and 'innate' behavior is W. H. Thorpe of Cambridge University, author of the book under review.

The book is organized in three sections: a description of ethological instinct-theory, a discussion of types of learning, and a survey of the learning abilities of animals by phyletic groups. The focus is on the life of the animal in nature, and its aim is summarized by Thorpe: "Laboratory investigations which have no bearing on the problems encountered in the wild will be passed over; those which illuminate the adjustment of the innate behaviour patterns to the normal conditions of life will be more fully discussed." This is a most desirable aim and helps explain the current vitality of ethological work.

**T**HORPE assigns primary importance to the heuristic value of the distinction between 'innate' and 'learned,' or 'inherited' and 'acquired,' as major categories of behavior. It is the reviewer's opinion that such distinctions have value primarily when they are provisional and made for the purpose of deciding the next step in the study of *development*. Thorpe, however, tends to use the term *innate* as designating a *class* of behaviors for which it is possible to specify forms of organization and to suggest neural mechanisms peculiar to the class. Concerned as he is

with the question of whether each behavior pattern is innate or learned, this reification of 'innate' leads him to a number of rather abrupt and premature conclusions about the development of various types of behavior. Thus, in discussing conditioning he speaks of the unconditioned response as innate, although he elsewhere provides evidence that this kind of talk is misleading. He speaks of some behavior patterns as being "so fully motivated internally as to warrant the provisional assumption that they are innate," although this is more a reference to the hypothetical neurology of his instinct theory than to any developmental study of the behavior being considered. He speaks of the raiding pattern of army ants, described by Schneirla, as primarily controlled by the "inherited behavior pattern," a statement misleadingly oversimplified and certainly unjust to Schneirla's own subtle formulation of the problem. Without citing any evidence, he dismisses Kuo's studies of the development of behavior in the embryonic chick with the flat statement that Kuo was wrong in assuming that any learning could take place at this stage. When experiment shows that some 'instinctive' act does not develop when practice is prevented, Thorpe speaks of the "regression" of the instinct through non-use, thus preserving its 'innateness' in the face of the most direct possible evidence to the contrary.

In his phyletic survey of learning, Thorpe sees evolutionary differences in the relative *amount* of 'learned' behavior, but does not sufficiently analyze *qualitative* differences at different levels. His method is to define several types of learning and then to assign various behavior patterns to these categories, almost regardless of level of organization. This pro-

cedure results in frequent overestimation of the psychological level of animal performances. Thus he speaks of "associative learning" in Protozoa on the basis of rather dubious evidence. In the behavior of Coelenterates, he notes remote parallels with 'instinctive' behavior in higher animals. He fails to make any real distinction between insect and mammalian learning, and speaks of an insect making a "planned detour" where a simpler explanation is available. He equates the tendency of a parasitic insect to lay eggs on the kind of host on which it has been reared with latent learning in mammals. He equates the homing of fish with maze learning, although the homing probably depends on the animal's reactions to gradients at the stream forks, which may be a different, much simpler performance psychologically than the rat's behavior at a choice point. As operational descriptions these definitions are plausible but Thorpe's own task requires more attention to the characteristic biology and psychology of the different phyletic levels.

**T**HESE petulant expressions of the reviewer's prejudices should not obscure the fact that the book will make an important contribution to the education of any psychologist who reads it. Thorpe's insistence on the relevance of the real-life behavior of the animal for the interpretation of laboratory experiments is entirely salutary. Psychologists who work mostly with one or two species of mammal will find the book a fascinating reminder of the actual diversity of forms and of behaviors that are to be found in nature. The volume is to be heartily welcomed as a major attempt to assimilate the findings of experimental psychology into the body of ethological literature.



*Anxiety for the future time, disposeth men to enquire into the causes of things; because the knowledge of them maketh men the better able to order the present to their best advantage.*

—THOMAS HOBBES



# CP SPEAKS . . .

THE American Association for the Advancement of Science has sponsored for 1956-1957 its Traveling High School Science Library of 200 books, and printed the list in *Science*, 23 November 1956, pp. 1013-1017. CP wondered how many of these books would be on psychology and checked on the list only six, including ethology, but excluding anthropology, ethnology, history of science, natural philosophy, physiology, scientific method, and zoology, even when they seem to touch psychology in spots. The list has no books on personality, psychological adjustment of the individual, psychotherapy, or social psychology. The six that CP counted are:

- H. E. Garrett. *Great Experiments in Psychology*. Appleton-Century Crofts, 1951.
- P. W. Grabbe. *We Call It Human Nature*. Harper, 1939.
- K. Z. Lorenz. *King Solomon's Ring: New Light on Animal Ways*. Crowell, 1952.
- N. L. Munn. *The Evolution and Growth of Human Behavior*. Houghton Mifflin, 1955.
- Anne Roe. *The Making of a Scientist*. Dodd, Mead, 1953.
- Karl von Frisch. *The Dancing Bees*. Harcourt, Brace, 1955.

The AAAS solicits comments about its basic book list, both omissions and inclusions. If psychologists will make suggestions for inclusions to CP, then CP will both publish the suggestions and forward them to the AAAS. Be sure to list author, initials, title, publisher, and date.

**W**ILBERT McKEACHIE, with the collaboration of Gregory Kimble, has just published (Ann Arbor, Mich.: George Wahr, 1956) the third edition of his *Teaching Tips: A Guide-Book for the Beginning College Teacher*. Claude E. Buxton writes CP to say that "this is a very informal and very informative

little manual, written originally to aid new graduate-student instructors at Michigan in acquiring the skills of teaching. It is practical in orientation and pretty much limited to preparing the teacher for giving and living with the introductory course in psychology. It pays some attention to research on teaching skills and its relevance to the improvement of these skills." CP thinks that the number of teaching fellows who ought to get hold of this little 124-page book must be very large. No price is given, but it cannot cost much.

**Q**UITE a number of letters come in from readers who assert that they read CP "from cover to cover," which must mean that they leave no page unscanned and read many. One fan accomplishes this feat only for CP and the *New Yorker*. Another reads CP through under the dryer at the hairdresser's. This is good, to learn that CP appeals to the long-hairs as well as the egg-heads.

**T**HE editors of the *Scientific American* have gotten out *A First Book of Animals: a Twentieth-Century Bestiary* (Simon and Schuster, 1956, 240 pp., \$1.00) which, says Frank Beach, "is 'an illuminating and entertaining collection of articles reprinted from the *Scientific American* and dealing with a variety of patterns of behavior in many different kinds of animals. The authors,' Beach says, 'are authorities in their own fields and the presentations are short, lucid and eminently readable. The topics represented range from T. C. Schneirla's studies of army-ant migrations to Harry Harlow's investigation of curiosity in monkeys. Aside from the sheer enjoyment of learning about the complex behavioral adjustments of various species, psychologists will find in these little essays a wealth of illustrative material which would brighten many an undergraduate lecture in introductory psychology.'"

Dr. Clifford T. Morgan writes CP: "Psychologists interested in tranquilizing drugs and LSD, as well as in drug effects and biochemical correlates of cerebral function, ought to keep an eye on the new *Journal of Neurochemistry*. This quarterly, international journal, sponsored by a board of distinguished biochemists and neurophysiologists, made its first appearance in May, 1956. It contains articles on reserpine, glutamic acid, enzymes, and related neurochemical processes; and it signals the rapid growth of a field that may develop a close kinship with both clinical and physiological psychology."

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**I**N this issue CP prints a letter from Dr. Hill suggesting that there are many tools as essential for psychological research as are foreign languages—mathematics, for instance. That is the view of the psychologist dedicated to science: nothing matters but research which provides the sanctions for whatever prerequisites need learning. A practical, functional view it is. Another view, however, is that these dedicated scientists form an in-group, an élite marked off from others by their special motivation. They need a community of learning, a badge for their guild, a common set of aspirations and skills and at times even special jargons that reflect the community of their values and understanding—they need all that to provide the social motivation which a member of an in-group has and the isolated investigator lacks. There was a time when this sense of belonging to "the community of educated men" could be had for a sufficient knowledge of the seven liberal arts—grammar, logic, and rhetoric (the trivium), arithmetic, music, geometry, and astronomy (the quadrivium). Then the stimulus to the intellectual life lay less in those seven kinds of knowledge than in the community of belief about their importance. Dr. Hill's suggestion seems to look toward more individuation of expertness, many smaller in-groups. Would there be a loss of motivation here? Has there been? Is it inevitable that scientists—psychologists even—should lose some of this in-group stimulus as the expertness proliferate?

—E. G. B.



# Do We Need More Conflict?

Lewis Coser

**The Functions of Social Conflict.** Glencoe, Ill.: Free Press, 1956. Pp. 188. \$3.50.

Reviewed by ROBERT HEFNER

*who is a member of the Department of Psychology at the University of Michigan and is Managing Editor of the new Journal of Conflict Resolution. He is thus the perfect reviewer of a book that urges that some conflict is too good to be resolved.*

THIS is a book by a sociologist, about the sociology of conflict, criticizing the modern points of view of other sociologists on conflict. But the line between sociology and psychology is not so clear that the volume does not deserve attention by psychologists. Certainly psychologists are much concerned with conflict, both intra-personal and inter-personal, and Kurt Lewin appears among the 'sociologists' whose views Coser considers here. Although Coser talks entirely in terms of inter-personal and inter-group conflict, there is mounting evidence that *conflict* at all levels has certain common properties that can be abstracted, and that the study of conflict at one level may provide insights and hypotheses concerning conflict at other levels. (See, for example, the second issue of the new *Journal of Conflict Resolution*.)

The stated purpose of Coser's book is to correct what the author believes to be an over-emphasis in recent sociological writings on the negative aspects of conflict. Actually, the entire book is devoted to the positive functions of conflict, a choice that results in a picture over-balanced in the other direction. Having stated his purpose, Coser seems to say throughout the remainder of the book that conflict is a good thing; it should be fostered and nurtured, not eliminated. He does indeed make one qualification: "To focus on the functional aspects of social conflict is not to deny that certain forms of conflict are indeed destructive of group unity or that they lead to disintegration of specific social structures"—

but he discusses this point no further. An elaboration of the specific conditions under which conflict is functional, or of the relative strengths of the functional and dysfunctional aspects, would have been welcome.

An introductory chapter discusses the sociology of the sociology of conflict, that is to say, the social conditions under which three generations of American sociologists have operated, and the influences that these conditions have had upon the theorizing and research of each generation. Coser's proposition is that the first generation, circa 1907, addressed themselves primarily to a reform audience, and consequently (or in addition) regarded themselves as agents of reform. This self-percept called attention to social conflict, and especially to the fact that much social change was brought about only by conflict. Therefore early sociologists were interested in conflict and aware of its positive functions. The second (1930) and third (present) generations of sociologists, on the other hand, have tended increasingly to reject the role of reformer in favor of either purely academic and professional pursuits or the position of advisor to decision-makers in public or private bureaucracies. In positions like these the new sociologists are either unaware of the tremendous social importance of conflict or they seek to perpetuate the status quo—to avoid conflict or speedily to eliminate it if it pops up.

THE major portion of the book is an extension of the work of Georg Simmel on conflict (circa 1908, Eng. trans., Free Press, 1955). Propositions and extensive quotations from Simmel introduce each chapter. The body of a chapter documents the proposition by reference to sociological theory and research. Each chapter is then concluded by a restatement of Simmel's proposition, with modifications where indicated by the survey of modern thought. In the main, Coser agrees with Simmel, and many of his modifications are nothing more than rewordings into more modern terminology. It is perhaps a moot question whether or not Coser, despite his fifty years' advantage, has improved upon Simmel enough to justify a new book.

The flavor of the book can be gathered from a few selected propositions: con-

flict with out-groups increases internal cohesion; conflict binds antagonists; the closer the relationship, the more intense the conflict; conflict creates associations and coalitions; conflict establishes and maintains balance of power.

IN reading this book one is plagued by the fact that no adequate definition and delimitation of *conflict* appears. In particular, the author fails to distinguish conflict from the processes which may follow it, especially the process of conflict resolution. Certainly conflicts (and disasters, deaths, and other 'negative' phenomena) often result in gains of one sort or another. Yet this is not the same thing as saying that conflict itself has functional properties. Coser's failure to give a precise and explicit definition has made it possible for him to include these aftereffects of conflict and thus to muddy the issue. More serious, perhaps, is the fact that no experimental attack on the problem is discussed or even suggested. As an experimental psychologist this reviewer views with alarm 188 pages of uninterrupted arm-chair theorizing in 1956.

Of particular significance for psychologists, perhaps, is the emphasis that Coser places on the distinction between "realistic" and "non-realistic" conflict. Psychologists are wont to deal with conflict as a non-realistic phenomenon, i.e., based on misunderstandings, projection, and other distortions of reality. Coser's treatment calls attention to the other important bases for conflict, the "realistic" ones.

The major thesis of this book, though not fully demonstrated, is certainly important. Any proposal for the elimination or speedy resolution of conflict requires consideration of possible attendant positive functions. In removing what we, in ignorance, regard as purely negative, we may discover that we have created a social or psychological vacuum.



*The most beautiful thing we can experience is the mysterious. It is the source of all true art and science.*

—ALBERT EINSTEIN



# Autoanalytical Couchman

Stephan Lackner

**Discover Your Self! A Practical Guide to Autoanalysis.** New York: Merlin Press, 1956. Pp. xii + 192. \$2.95.

Reviewed by GLEN HEATHERS

*who teaches child behavior and personality development at Sarah Lawrence College and who came from Guthrie through Hull, Dollard, and Sears to psychoanalysis, counseling, and psychotherapy. He teaches, used to practice, and is involved in research on personality dynamics.*

THIS book disowns or disregards virtually all of the wisdom and skills which psychiatry and psychology have evolved during a half-century of learning how to help people with their emotional problems. It is a slap-happy resort to autosuggestion which purports to find a road through Freud and Pavlov back to a doctored-up Couéism.

Lackner admits in his *Introduction* that a book cannot do the work of a competent psychiatrist, but he proceeds as though he does not believe it. He warns his reader that he, the reader, cannot escape the necessity of wrestling with his resistances by seeing a psychoanalyst; so he advises him to stay at home, lock the door of his room, lie down on his 'autoanalytical couch,' and grapple alone with his problems. True, he advises going to a psychiatrist in case of "severe depressions and disorders," but how is the unguided self-analyst to make this judgment?

Lackner bows to Freud in telling the autoanalyst to use free association to bring disturbing thoughts to consciousness. Sometimes abreaction occurs and the disturbing thoughts are "digested and forgotten." Sometimes more needs to be done. One solution is through "conditioning," a linkage between worries and a lighted ten-watt lamp so that turning off the lamp turns off the worries. Another is autosuggestion which uses some "handy thought"—such as "It's only my glands"—to dispose of worries. If you are football-minded, you can

visualize these Four Horsemen overwhelming stubborn Old Neurosis: Lackner calling signals and handing off, Freud ripping holes in the line, Pavlov and Coué piling up the autoanalytical yardage.

If unpleasant memories continue to haunt you, Lackner offers yet another solution under the heading of acquiring a "balanced mind." Whenever a bad thought comes to mind, associate it with a good thought. Presto! Your mind is balanced. Let us hope this is a unidirectional affair. Otherwise, good thoughts would tend to call up bad ones and you could never get ahead.

Lackner is described on the book jacket as a research psychologist with the PhD from the University of Giessen. Yet he offers in research no basis whatsoever for his exposition of autoanalysis. It is a dubious substitute that he mentions Freud's self-observations and Horney's book on the subject as reasons for favoring self-analysis.

Very few psychologists will take Lackner's book seriously. Laymen in search of help will be wise in showing a similar restraint.

## Measuring Social Needs

Eric F. Gardner and George G. Thompson

**Social Relations and Morale in Small Groups.** New York: Appleton-Century-Crofts, 1956. Pp. ix + 312. \$6.00.

Reviewed by WALTER H. CROCKETT

*who has recently left Kansas State College to join the Department of Psychology at Clark University. He is at present deeply involved in research on interpersonal perception and the organization structure of groups, believing that social psychology should rely on the empirical methods developed in general psychology.*

THIS book reports on an extensive research project in which there was developed a technique of determining the "potentialities [of groups] for satisfying their members' psychological needs." The authors feel they have overcome the shortcomings of traditional

sociometric techniques by providing a measure of interpersonal relations which (a) insures an interval scale, (b) makes possible comparisons between different groups, and (c) is grounded in the psychology of human needs.

This approach springs from their interest in the gratifications that persons receive from belonging to groups. Thus, in a given group, the relationships between every pair of group members is examined to determine the degree to which participation in the group satisfies certain specified needs for each member. For example, in the study of fraternities reported here, members rate each other's capacity for reducing the needs for affiliation, "playmirth," succorance, and achievement-recognition. In other groups the ratings are relative to other needs.

The measuring instrument first requires that the respondent consider some large group of his male acquaintances as goal objects capable of reducing in varying degree each of the needs described above. For each need a continuum, ranging from least satisfying to most satisfying, is established, and the respondent provides the names of five persons from this large population, who, in his opinion, divide that continuum into four segments of equal length. Using these names as benchmarks, he then identifies the position on the continuum of every member of the smaller group under investigation.

On the assumptions that the reference population is common for all respondents, that the intervals of each respondent's scale are of equal length, and that all members of a given group use the same scale of judgment, the ratings are received and given by group members are averaged, and several indices of within-group variance are computed. By adding the further assumption that the judgments are independent of group membership, various "social relations indices" obtained from different groups are compared.

These are powerful assumptions. Considering the extraordinary difficulty of finding even an ordinal scale in judgments of the simplest social-psychological phenomena, the tenability of the present ones seems highly questionable. In fact, the one test made of the assumption of equal intervals shows significant

differences between intervals at different segments of the continuum, significant differences between interval sizes for different groups, and a significant interaction between interval size and group membership.

**T**HERE are two ways of reacting to such a result: (a) one may ignore it, or (b) one may utilize a method of analysis which does not require the questionable assumptions. The authors choose the former alternative on the grounds that the differences "are sufficiently small to warrant . . . the assumption of equal interval sizes" (p. 140). An examination of the data, however, indicates that the differences are small because the interval sizes themselves are small (Table 15, p. 134); the data do not satisfy the assumption of equal intervals.

The authors expected that respondents whose social needs were satisfied within a given group would be highly attracted to that group and would work diligently to help achieve the group's goals. Nine fraternities at Syracuse University participated in a study testing this hypothesis. Social-relationship indices obtained for the fraternities were correlated with a number of measures of group morale and group effectiveness.

Many of the measures of morale and effectiveness were interestingly constructed, and there were a goodly number of respectably large correlations between these measures and the indices of social relationship. They present, however, no theoretical rationale to account for the pattern of positive and negative correlations. Furthermore, the reader is left to ferret out for himself the profile of correlations between any one index of social relations that may interest him and the various measures of morale and effectiveness used.

Further research is likely to produce a new version of this technique, one based upon less restrictive assumptions. Such a technique, however, will supplement, rather than supplant, traditional sociometric methods; for, while conventional sociometric techniques and modifications thereof may not provide comparative information about the need-reducing properties of groups, they do permit—as the method described here does not—an analysis of the connections

between individuals and subgroups that reveals the regular patterns of interaction, the structure, of the group.

In fine, we may note that this book provides a series of contrasts. The long section on scaling theory is poor and the assumptions required by the measurement technique appear to be untenable, but the basic conceptions underlying the methods of analysis are both novel and provocative. The interpretations of statistical tests are sometimes questionable, yet the empirical relationships are often extremely interesting. The style of writing is highly redundant and laden with unnecessary jargon; nevertheless it is evident that much thought, time, and careful analysis have gone into this work. All in all the authors have provided us with a number of stimulating and thought-provoking ideas.

## Rado Fecit

*Sandor Rado*

**Psychoanalysis of Behavior: Collected Papers.** New York: Grune & Stratton, 1956. Pp. vii + 387. \$7.75.

*Reviewed by* SIMON H. TULCHIN

*who is a clinical and consulting psychologist, a lecturer in Columbia University's New York School of Social Work. For some years he has been variously involved in teaching, training, practicing, and working with psychologists, psychiatrists, and social workers.*

**T**HIS volume is a collection of papers on a variety of topics published by Sandor Rado between 1922 and 1956. The papers published before 1935 are translations from the German.

Representing the work and thinking of the author over a period of more than three decades, the collection presents the inherent problem of unevenness in quality and significance, looseness of topical approach, repetitiveness, the development of new terminology and general modification of underlying theory.

While recognizing the enormous contribution of Freud, Rado gives early indication of his divergence which culminates in the evolution of basic dif-

ferences. Man's craving for omnipotence (Rado) replaces the Oedipus complex (Freud) as the mainspring of all cultural effort. Consciousness becomes awareness and the unconscious is simply non-reporting nervous activity. Freud's classical psychodynamics searched for motivating forces and psychological mechanisms to find out how the organism functions. Later, Freud focused his attention on why these forces operate. He identified motive forces with the forces of instinct to develop his theory of instincts, an undertaking that led him to philosophic speculation. Freud considered psychoanalytic therapy as a process of re-education. According to Rado, developing insight is insufficient in itself. He rightly insists that uncovered material must be related to the current problems of adaptation and the need is for emotional re-education. There are other fundamental differences.

Rado develops his system of adaptational psychodynamics. The organism through its inherited mechanisms and modified behavior tends to meet its needs by means of integrative activity with the integrative apparatus composed of four units—"the hedonic unit, the units of brute emotions, emotional thought and unemotional thought." In the hedonic unit the movement is toward pleasure and away from pain. The emotions are divided into two units—emergency emotions based on pain, like fear and rage, and the welfare emotions based on pleasure like love, joy, and pride. Emotional thought is selective and is an inferior method of interpreting experience. At the highest level, unemotional thought governs intelligent action. The organism's attempt to avoid danger may result in the overproduction of the emergency emotions (fear, rage) and interfere rather than aid in its task of adaptation. Disordered behavior results from the disturbance of integration. Thus, neurosis is impaired adaptation, while psychosis is adaptive incompetence. Adaptational therapeutic techniques may be reparative (having limited goals) and reconstructive (aiming at total reconstruction). Interpretation must always deal with the patient's present tasks of adaptation and must be measured by his increasing ability for "healthy enjoyment of here and now."

Rado has made a laudable attempt to



study and analyze the dynamics of human behavior in terms of its adaptive value. He recognizes that vast areas of ignorance still remain and that contributions to our knowledge are needed from many disciplines and directions. He maintains, however, that psychodynamics is "an offspring of medical inquiry," an attitude which this reviewer cannot accept. Neither can we accept the author's opinion that psychological techniques developed by other behavioral sciences are based on "common sense plus a generous sprinkling of superstition." When we add to these comments, the further dictum that psychodynamics can only be understood by those who have been analyzed (by what school?) and that psychotherapy is a medical procedure in spite of the fact that it is defined as "the use of human influence for the treatment of behavior disorders," then the reviewer raises the question as to the degree of emotional thought involved.

## Who Is Just?

**Sir Walter Moberly**

**Responsibility: The Concept in Psychology, in the Law, and in the Christian Faith.** Greenwich, Conn.: Seabury Press, 1956. Pp. 62. \$1.25.

Reviewed by L. HAROLD DEWOLF

*who is Professor of Systematic Theology at Boston University, after having been a professor of philosophy. He has long been interested in penal justice, is perpetually in conference, with judges, lawyers, penologists, and prisoners, and right now is conducting a seminar on penal justice. He is the author of a chapter on The Church in the Prevention and Treatment of Crime.*

**R**ARELY is so much provocative, precisely defined thought on a subject of broad human interest presented so colorfully and in so few words, as in this meaty little volume by a well-known Anglican churchman and philosopher. The author sees the psychologist and the lawyer as representing opposite poles of concern with the convicted law-breaker.

The psychologist sees him as a mal-adjusted victim of forces in the face of which only a pre-scientific moralism could hold him responsible. What is needed is that the poor wretch be so treated and his environment so changed as to bring about an adjustment more in accord with the social interest.

The lawyer, on the other hand, replies that the law must assume that most adults are free and responsible moral agents. If no adults were responsible persons, then who would responsibly legislate, judge, or prescribe treatment? If we assume that a few, but only a few, are responsible, then the best society we can hope for will be a kind of vast mental hospital, where the laboring but non-responsible many are wards of the ruling few. Since we refuse to accept such a slave society, we must assume that most people are responsible and must treat them accordingly. The law can afford to make special cases of a few obviously pathological people, but these must remain the rare exception, else law, government, and a decent social order become impossible.

The Christian faith, as Moberly sees it, supports the psychologist's concern with the subjective condition and with the social malaise out of which the offending deed issued. Likewise, Christian and psychologist agree in rejecting a proud, censorious moralism, with its notion that our main business with the offender is to settle a legally defined account. Our principal task, they believe, is the vastly harder work of changing the man and the society in which he lives.

Yet the Christian faith also supports the lawyer's view that sin is not a mere disease of which the offender is an unfortunate victim. The psychologist is right, says the Christian, in finding that all men share in the tensions and in the corrupting forces of the environment which have made some men conspicuous offenders, but he is wrong when he concludes that this makes all men guiltless. Instead, it means that all are guilty and hence all are in need of forgiving acceptance and change of heart.

Most important of all, the Christian will acknowledge his own unworthiness to analyze and remake his brother. Instead, his main effort will be devoted to setting the wrongdoer in a Christian fellowship where he will be gladly accepted by

people gratefully conscious of God's forgiving love. Here he is most likely to respond to the judgment and mercy of God himself.

My principal theoretical objections concern Moberly's defense of such definitions of sin and guilt as to include without distinction deliberate misdeeds, acts sincerely intended but actually contrary to the true good, social evil, and unresolved subjective moral conflict. He is right in refusing to dismiss any of these acts or conditions from moral judgment and from a self-burdening sense of responsibility. Nevertheless, clear and firm distinctions should be made and suitably defined terms differentially employed.

A disappointment arises because Moberly throws so little light directly on the question of what would constitute true penal justice in the court of law. Many judges, earnestly concerned, would like to know.

Moberly has, however, unerringly raised the right questions, and he has, moreover, correctly defined the ultimate responsibility of us all for the nurture of all in a responsible humanity. This book, *Responsibility*, will be read with profit by lawyers, psychologists, churchmen, and other concerned citizens.

## Rorschaching the TAT

**William E. Henry**

**The Analysis of Fantasy: The Thematic Apperception Technique in the Study of Personality.** New York: John Wiley & Sons, 1956. Pp. xiii + 305. \$6.00.

Reviewed by BERT R. SAPPENFIELD

*who is a clinical psychologist and Professor of Psychology at Montana State University where he teaches clinically oriented courses in psychology. He is best known as the author of Personality Dynamics (1954).*

**H**ERE is a recent addition to a growing list of good-to-excellent analyses of the TAT. It might be supposed, in view of the several comprehensive

manuals already available, that hardly anything new could be added to what others have said about the TAT. Nevertheless, in spite of his own misgivings when he first approached this book, the reviewer discovers in it some distinctive contributions.

The theoretical portion of this book is not easy to read. Whether this difficulty is attributable to the psychologist's unfamiliarity with sociologically derived concepts or due simply to ponderous writing is, in itself, a difficult question; but the reviewer's untested hypothesis is that the author does not feel so secure in dealing with theoretical material as he feels when attacking the analysis of a set of TAT stories. So, in passing from the theoretical to the strictly technical portion of the book, the reader senses a change not unlike that of driving from a section of road under construction onto a finished superhighway.

The reader who is conversant with psychodynamic concepts and partial to them is likely to gain a mixed impression of Henry's two chapters of theoretical discussion. On the one hand, he will recognize in the author's formulations something he has known all along; but, on the other, he will sense a foreign quality in them. Thus there is the expected acceptance of 'psychic determinism' and the customary emphasis on the consistency and uniqueness of personalities (with due regard to the personality features common to a given cultural milieu); there is sufficient recognition of motivation and anxiety as central concepts in personality dynamics; and there is some discussion of introjection, projection, and impulse denial as important features of adjustive behavior. Yet there is also a sociological or interpersonal emphasis in the formulations, one that is disturbing to the intellectual balance of the psychologist who is accustomed to locate behavioral determinants within the behaving organism. This complication is the outcome of theory construction within a sociological frame of reference, incorporating concepts of Lewin, or Freud, and of Sullivan.

This comment is not meant to suggest that there is any critical fault to be found in the theoretical formulations which Henry has provided, though it does at least raise a question as to

whether it is logically necessary (even though defensible) to introduce interpersonal concepts in order to give an adequate account of behavior. The reviewer, at least, remains unconvinced that it is necessary to look outside the individual for the determinants of behavior, whether it be in response to TAT pictures or in response to other kinds of 'reality stimuli'.

In justice to the author, it should be noted that he explicitly denies himself the privilege of formulating a complete theoretical substructure for thematic test analysis. "The task of summing the knowledge relevant to interpretation is not only beyond the skill of the author but out of place in this volume." And, while he maintains that "any theory justly described as psychodynamic will provide the flexibility necessary to interpret fantasy material," and while he does not explicitly espouse Freudian psychodynamics, there is ample evidence in his technically oriented chapters that, like many other TAT interpreters, he relies heavily on Freudian principles for his contentual interpretations.

**I**N the remaining chapters (roughly ten out of the twelve, and comprising 235 pages) the author has provided what is perhaps the best of the existing manuals for TAT interpretation. One is impressed, first of all, with Henry's exhaustive analysis of variables for the description of behavior in response to the TAT. Not only does he differentiate the many variables relating to the content of stories, but he also differentiates a number of variables relating to their structure or form. He makes explicit here, as he has done elsewhere (e.g., in his chapter in *Introduction to Projective Techniques*, edited by Anderson and Anderson), that many Rorschach-derived concepts are applicable to TAT analysis. Thus he writes: "An examiner with some clinical experience in intelligence testing and experience with TAT records of known IQ level can usually estimate the IQ within five points. The other characteristics of the mental approach can also be outlined in much the same manner as is done in the Rorschach method." Henry can therefore be credited with being the first to suggest 'Rorschaching the TAT.'

Although Henry is not distinguishable from other TAT interpreters in respect of his reliance on yet-to-be-validated intuitions, and although he devotes little effort to going outside the TAT stories for purposes of external validation, nonetheless he displays an awareness of this general deficiency in work with 'projective' instruments. He seldom misses an opportunity to insist on the next best alternative, the testing of hypotheses derived from one or more stories against the data available in the entire TAT record of an individual—a validation in terms of internal consistency that is not, of course, an innovation in Henry's treatment of the problem.

One of the major contributions of the present work is the author's refreshing emphasis on the significance of "normal and ordinary" responses to TAT pictures, for it is in such responses that an interpreter can discover the control functions or the assets of a personality. Previous discussions have tended too strongly to imply that meaningful personality data are to be derived only from unique responses, which show evidence of idiosyncratic perceptual distortions and which lend themselves to psychopathological interpretations.

Five of the twelve chapters deal with "illustrative analyses," in which the reader is given an opportunity to observe the author in action as a TAT interpreter. These chapters provide a richer exhibition of the author's approach to interpretation than is customarily to be found in such manuals. For example, five full pages of discussion are devoted to the tentative interpretation of a single story (the first by a given subject), which is itself only about thirty-five words in length. Henry's interpretations are highly credible and reflect exceptional sensitivity and skill.

Although this book is not the first to present a treatment of "the stimulus properties of the pictures," the reviewer doubts that any other set of descriptions is as adequate. Since an accurate understanding of the 'demands' made by the TAT stimuli has for TAT interpretation an importance comparable to that of norms for the interpretation of psychometric tests, it must be said that Henry has made a significant contribution through his publication of these descriptions.

In summary, then, it is the reviewer's opinion that, in spite of the fact that its theoretical introduction is spotty and in some respects gratuitous, and in spite of the author's pervasive modesty regarding his own work, this book is probably the best of the existing technical contributions to thematic test analysis. The student who is acquiring his first knowledge of TAT interpretation can learn much from it, and probably all clinical psychologists will be able to find in it some valuable additions to their present understanding.

## Psychoneurotic Manpower

**Norman Q. Brill and Gilbert W. Beebe**

**A Follow-Up Study of War Neuroses.** (VA Medical Monograph.) Washington, D. C.: U. S. Government Printing Office, 1956. Pp. xviii + 393.

Reviewed by CHESTER C. BENNETT

*who is Professor of Clinical Psychology at Boston University where he is busy, among many other activities, in training new PhDs in clinical psychology. He is a Consultant in Clinical Psychology to the Veterans Administration and he has worked for the VA in other clinical capacities before. In the Navy he helped with a follow-up project on the validation of the tests for the selection of pilots, and before that he had been involved in a similar undertaking with problem children. And that is just a few of the things he has done.*

**D**URING World War II more American servicemen were hospitalized for psychoneuroses than for battle wounds. There were 700,000 admissions. This follow-up study, sponsored by the National Research Council in cooperation with the Veterans Administration, the Army, and the Navy, is a valiant effort to ascertain what became of these psychiatric casualties.

By sifting military records a randomized sample of 1500 cases was drawn from the 1944 admissions—white, male, enlisted. A nation-wide search relocated most of them after a lapse of five years.

With the help of some 225 psychiatrists, almost a thousand were personally interviewed. The Red Cross, VA, and military records furnished partial information on the others. Percentage-wise the sample is small, but its representativeness was carefully considered. The study had data on a control sample of the 1944 Army based on random serial numbers. An additional comparison group, made possible by the Korean War, was composed of 1951 recruits subjected to intensive psychiatric interviews.

In such an investigation the approach is necessarily empirical, the data largely subjective. The psychiatrists were guided by a 25-page interview form containing pre-coded rating scales and generous space for comment. They were asked to evaluate in retrospect the man's pre-service personality and adjustments, his military experience, illness, and treatment, and his post-war status and problems. They were to elicit the subject's own evaluations and attitudes. The interview findings were collated with military records of combat participation, decorations, discipline, and much besides.

With so many variables to manipulate, the data could be subjected to about as many statistical breakdowns as there were psychiatric breakdowns under scrutiny. This symmetrical ratio is well-nigh achieved. In 282 tables and graphs the authors report an exhaustive array of comparisons between casualty and control groups and various analyses of subgroups. They use percentage distributions and indices to facilitate comparison. Their findings are discussed with due regard for statistical confidence levels. The text is cautious, even prosaic. The more significant implications are condensed in frequent brief summaries. Even so, the reader feels vaguely like a Univac overwhelmed by more data than he has circuits for.

**I**N the face of these massive labors, it seems impertinent to ask whether any new knowledge has been generated. Yet such is the reviewer's responsibility.

We learn that the psychoneurotic group were a little older, less educated, and more often single than their comrades in arms. They were judged to have a higher incidence of pre-service adjust-

ment problems. This is not very startling news for clinicians. The trends are, moreover, only relative. Indeed, the authors conclude that "comparatively few were really very sick at the time they entered service."

Particularly is this conclusion true for the men who broke down in actual combat. In contrast to non-combat casualties they presented fewer pre-service difficulties. They were rated less sick at the time of illness and showed higher rates of recovery and reassignment to duty than to discharge. Again clinicians will feel at home with the implication that stress as well as predisposition can contribute to the etiology of neurosis.

With the follow-up data, however, it becomes apparent that the group, if not the problem, is less familiar to clinicians. Although the psychiatrists felt that 40 per cent could benefit from therapy (and 40 per cent of the men themselves felt likewise), only 2 per cent had received intensive post-war psychotherapy. Only 15 per cent had received any psychiatric treatment. Only 11 per cent had gone to the VA for help. Indeed, less than one-fourth received psychiatric treatment worthy of the name at the time the breakdown occurred. It is evident that a great many wartime patients have had little contact with mental health services.

Despite this minimal help, three-fourths of the follow-up group had full-time employment. A majority were rated psychiatrically improved since separation. The authors find the net effect of breakdown in the service "not as great as might have been expected."

Perhaps the clearest implications of the study emerge from an actuarial analysis of the findings in relation to military manpower. From the pre-service data the authors derive a "predisposition index" based on nine subjective variables. Applied to the 1944 manpower pool as a screening measure, this index might have reduced the incidence of psychoneuroses by 40 per cent, through rejecting 12 per cent of inductions. To eliminate 80 per cent of breakdowns we must have rejected 50 per cent of servicemen. We should note, of course, that the estimates apply to a population already screened for blatant psychiatric misfits.

In an emergency, the military establishment can hardly afford to reject six to ten able-minded men to eliminate one



potential neurotic. As a matter of fact, what would be gained by doing so? If the follow-up group is representative, psychoneurotic servicemen served an average of almost three years. Two-thirds went overseas and nearly half reached combat. Twelve per cent may wear the Purple Heart. More than half returned to duty after the initial breakdown. No doubt as a group they contributed more than they cost to the war effort.

Certainly neurosis is here to stay. In a war of machines and logistics it may be no less troublesome in overalls than in uniform. The follow-up study develops no formula for keeping psychoneurotics at home. It suggests rather that attention be focused on more judicious utilization of marginal manpower and more effective treatment of the inevitable breakdowns that occur. The recommendation seems as pertinent for the general community as for the General Staff.

## Married Neurotics

Victor W. Eisenstein (Ed.)

**Neurotic Interaction in Marriage.** New York: Basic Books, 1956. Pp. xv + 352. \$5.50.

Reviewed by DOROTHY F. ZELIGS

who is a practicing psychoanalyst and who is also a doctoral candidate working with Professor Ernest Osborne in the Department of Home and Family Life at Teachers College, Columbia University. She is the author of psychoanalytic studies of Biblical personalities, studies that have been appearing in the American Imago.

THIS volume consists of individual studies by twenty-five different authors in the fields of psychoanalysis, psychology, anthropology, and social work, all relating in various ways to problems of neurotic interaction in marriage. Many of the contributions are on a high level of professional competency, as would be expected from such participants as Lawrence Kubie, Margaret Mahler, Ludwig Eidelberg, Edith Jacobson, Gustav Bychowski, and Robert Gomberg, among others.

The major portion of the book falls into two categories. One consists of the contributions of traditional psychoanalysts and the other represents the

newer orientation of the social-work school, which might be called the 'psycho-social' approach, a word frequently used in their presentations.

The psychoanalytic articles, for the most part, concentrate on the subject matter itself rather than on processes of therapy. They deal with the role that unconscious influences play in the selection of a mate and in the neurotic interactions of the relationship. While the concepts are, in general, familiar ones, these articles reflect a truly fine distillation of knowledge and experience by mature thinkers and workers in the field, wisdom directed to the specific area under investigation. The conciseness of the wording and the clearness of the theoretical formulations, as well as the careful selection of case material, add to the value of these studies. The articles range from a generalized approach such as the one by Dr. Kubie on *Psychoanalysis and Marriage: Practical and Theoretical Issues*, to such highly specific studies as *The Unconscious Meaning of the Marital Bond*, by Dr. Martin H. Stein.

The contributions of the social-work school tend to emphasize those aspects of theory and function which, they feel, differentiate them from the 'straight' psychoanalytic approach. They stress the importance of *interaction* as a basic force in marital relationships, considering it an entity in itself, apart from the degree of health or neurosis in the individual partners. It is the contention of this psycho-social approach that the nature of the interaction between marital partners is a separate component, a 'new' force, such that a totality emerges which, when viewed as a Gestalt, makes the whole greater than the sum of its parts.

Thus Dr. Gomberg writes, "The degree of marital equilibrium is not necessarily based on the degree of emotional health of the individual partners." Dr. Victor Rosen says, "Normalcy in one or both marital partners is not a necessary prerequisite for a harmonious marriage. An understanding of the compensatory mechanism is more pertinent in evaluating the constructive or destructive elements in the interaction." Dr. Bela Mittelman believes that "A marriage containing strong neurotic complementary factors (in this instance the husband's need for domination and superiority and the wife's need to lean

and submit) can be rather successful." These authors are careful to explain and to delimit the application of this theory and they express the importance of knowing the degree of pathology in each of the marital partners as well as the nature of the interaction itself. But their point of view sounds quite different from the psychoanalytic opinion as expressed, for example, by Dr. Kubie, who declares, "No one has ever married himself out of a neurosis. Instead . . . one will add the weight of his own infirmity to that of the other, with growing pain and resentment." Dr. Eidelberg says, "The problem of neurotic choice of mate can be solved only by analyzing the patient—not his marital problems."

This reviewer cannot help feeling that some of the differences expressed here have to do with semantics rather than realities. Few so-called traditional psychoanalysts would quarrel with limited goals directed to improving a marital relationship in ways that could bring increased satisfactions to both partners, if such ameliorative therapy were indicated or possible in a given situation. Dr. Gomberg himself emphasizes that "the casework approach" is possible only when there is no serious pathology in either partner or, as he puts it, "Casework deals with the adaptive functions of the ego." Psychoanalytic theory certainly would not dispute this thesis.

There is, however, for this reviewer an undercurrent of inconsistency in some of the opinions expressed by the advocates of the 'psycho-social' approach. On the one hand, they are careful to say that cases must be selected for this type of treatment and that individual psychopathology must be understood if the interaction itself is to be understood. On the other hand, they maintain that the degree of harmony and satisfaction in a given marital situation is not dependent on such pathology but rather on the character of the interaction. If the latter is true, why do cases have to be so carefully selected in terms of "sufficient ego strength or maturity," as Dr. Gomberg puts it?

THERE seems to be some confusion, at least as this reviewer sees it, about the differences between a marital equilibrium based on neurosis and one based on

health. The concept that two neurotic traits can balance each other is difficult to accept. A symbiotic relationship may be adaptive but it can hardly be called successful. Health is synonymous with the profitable use of constructive forces within the self and such forces either must have room to grow and expand or they will deteriorate. Neurotic enmeshment may make for stability of a certain kind, but it must be characterized by a rigidity that is not conducive to health or growth.

**A**NOTHER problem, one which may tend to confuse issues, is the use of psychoanalytic concepts and terminology in the approach of the social-work school. Here there is a tendency to picture the concepts as tools easily manipulated in the assessment of personality and to go on from there to the 'real job' of studying the interaction of the relationship. Thus we get a rather deft and formalized use of concepts such that their character is changed qualitatively from the way they are understood and utilized in psychoanalytic therapy. For example, Dr. Sidney Green writes, "The skillful caseworker must have an awareness of the balance existing between the libidinal and aggressive drives in the principal intrapsychic conflicts that have helped to shape the client's personality. . . . It is often necessary for the caseworker to distinguish between pre-oedipal and oedipal elements in the behavior of the client." He admits the difficulty of achieving this insight at times but nevertheless believes that, with the help of psychiatric consultations, success can generally be had. The kinds of insight that require many months of work on the part of psychoanalyst and patient seem to be gained rather quickly in the thinking within the psycho-social approach and are suggested as means toward further undertakings in mending family relationships.

It is interesting that, although the use of case material is quite extensive in this book, the reviewer could not find a single instance which demonstrated the oft-repeated belief that complementary neurotic traits in marital partners can balance each other to form a successful marriage. The only exception to this general statement is a rather brief

reference by Dr. Heiman to the effect that a pattern of infantile sexual behavior in one partner fitted in with a similar need of the other. This complementation may be adaptive but one would hesitate to call it successful.

Other related areas treated in this volume include the field of psychological tests as they are used for both diagnostic and therapeutic purposes, and an excellent section on group psychodynamics as a means for education and therapy. There is a definitive article by Dr. Norman Reider on the question of predictability of marital success and an interesting one on psychiatry and law as they relate to separation and divorce, written by Richard H. Wels.

## How to Help the Addict

Marie Nyswander

**The Drug Addict as a Patient.**

New York: Grune & Stratton, 1956. Pp. xi + 179. \$4.50.

Reviewed by HARRIS E. HILL

*who is Senior Research Psychologist in the Addiction Research Center of the National Institute of Mental Health in Lexington, Kentucky. This U. S. Public Health Service Hospital is the only hospital in the world that is entirely devoted to the treatment of the narcotic addict, and Dr. Hill is devoted to it. He is, you might say, a psychopharmacologist.*

**T**HE author, a person with a considerable background knowledge of addictions, presents here a well-written account of published findings and personal opinions that covers many disciplines, presents it in a style which is sufficiently popular to attract both layman and physician. Addiction is here characterized as a "distinct medical entity" which is "pandemic." It is probably neither. Recent, intensive studies, not mentioned by her, which were executed by New York University, have aided greatly in showing that addiction may be largely sociological in origin and, in general, quite localized. Also they show that the described incidence of addiction and its inferred rate of increase have been exaggerated, according to the

most reliable estimates. This author provides much information, however, on the addict and his milieu, although only four of her fifteen references on social pathology are of later publication than 1943.

Dr. Nyswander's summaries of the less controversial aspects of addiction, such as the pharmacological and physiological actions of various drugs, are adequate for imparting general perspective. Her discussion of the psychology of addiction is somewhat more difficult to appraise. The appalling but understandable dearth of good psychological studies has left her to give us a chapter composed chiefly of psychiatric hypotheses and theories which, although interesting, are mainly impressionistic. Although vacillating in this regard, she appears to hold that differences in personality characteristics of addicts and 'normal' persons are not among the fundamentally important factors in the genesis of addiction. The present reviewer thinks otherwise.

The author's arguments for a reconsideration of the addict's plight and for devising better methods for his rehabilitation present the strongest, if not the most valid, part of the book. Tone, purpose, and fact are well blended here to depict narcotic addicts as persons who are terribly misunderstood and mistreated, and who should be maintained on drugs dispensed by government clinics while their rehabilitation is attempted. In other words, the author appears to advocate a program of 'boring from without' rather than from within. Nevertheless, the British system of coping with addiction is summarized as a near-model for the United States, and as an argument for adopting a program advocated by the New York Academy of Medicine. The main theme is "The addict should be able to obtain his drug at low cost under Federal control in conjunction with efforts to have him undergo withdrawal."

Much of the enthusiasm for such a program is based upon the operation of clinics and dispensaries in the United States from 1919 to 1921. The information on this venture, however, which is vague and confused at best, does not warrant the laudatory statements and, in fact, provides contrary indications. Closure of the clinics is attributed to the

interference of law enforcement departments with the medical program against the wishes of physicians. Actually, an AMA committee recommended in strong terms that the Bureau of Narcotics use every means available to eliminate the dispensing of drugs, either by clinics or private physicians, to addicts for self-administration. This recommendation was adopted by the House of Delegates of the Association. While it is granted, generally, that present methods of caring for the addict and for minimizing addiction and associated problems are not ideal, there is a very real danger that adoption of the advocated proposals might increase the difficulties instead of ameliorating them. Unfortunately the author's outspoken empathy for the addicts and her many quite remarkable insights make treatment by the proposed clinic system much too appealing.

## A Clinic Has Its Say

**Sandor Rado and George E. Daniels (Eds.)**

**Changing Concepts of Psychoanalytic Medicine.** (Proceedings of the Decennial Celebration of the Columbia University Psychoanalytic Clinic, 19-20 March 1955.) New York: Grune & Stratton, 1956. Pp. viii + 248. \$6.75.

*Reviewed by MOLLY R. HARROWER*

*who is a consulting psychologist in New York City, involved in research as much as practice. Her professional activities have been many. Just now she is directing a study of the personalities of the freshmen in the Medical School of the University of Texas, and taking a sabbatical from office practice in order to work on 4000 records of re-tests of psychotherapeutic cases.*

THE title of this volume may well lead the reader to expect an historical and inclusive survey of changing concepts of psychoanalysis since Freud's first formulations. The subtitle, however, *Proceedings of the Decennial Celebration of the Columbia University Clinic*, puts the undertaking in a different, more cir-

cumscribed, though not less interesting, perspective.

The book is a collection of papers read by some thirty authors for the specific purpose of acquainting their audience with the work of the Psychoanalytic Clinic for Training and Research in its therapeutic and educational activities, and with the current research of its staff and former students over the past ten years.

The Clinic is in effect a new type of graduate school, offering a three-year, full-time curriculum to qualified physicians as a training in psychoanalytic medicine. In establishing it, the founders said that they "fought not for a new doctrine but for an old freedom, the freedom of unhampered inquiry." Thus the Clinic, in contrast to the existing educational opportunities in psychoanalysis, undertakes to provide greater freedom to the instructors in regard to the method of teaching, and its curriculum has been broadened to include "contributions from clinical and developmental psychology, comparative sociology, biology, and biochemistry."

Who uses the Clinic? A survey of the 435 persons who sought help reveals that 59 per cent were diagnosed as schizophrenic, a startlingly high incidence. Thirty per cent were classified as psychoneurotic, "the individual who emerges from childhood with an established pattern of adaptation that forces him, unawares, to damage himself in order to avoid the dreaded danger of damaging others," and for these patients treatment within the framework of Rado's adaptational theory has much to offer. A case history demonstrating this technique in action, where "the therapist is primarily concerned with the failures in adaptation of today," is included, thus affording the reader an opportunity to make his own comparison with classical analytical procedure.

The schizophrenic patient is envisaged by this group of research workers as suffering from a basic defect in the lowest integrating mechanisms of the organism and is not, therefore, amenable—except in superficial ways—to those techniques that use human influence. Because psychodynamic theory has failed to offer a satisfactory explanation for understanding the schizophrenic patient, intensive multidisciplinary research has been cen-

tered in this area. For example, the work of Heath and others has demonstrated that stimulation of the septal area of the brain of animals results in increased cortical activity as recorded through surface electrodes. Conversely, when these subcortical areas are damaged, slow cortical activity results, and there was, in these experiments, impairment of those aspects of the body chemistry important to adaptation.

A FEW schizophrenic patients in whom leads were implanted in this area showed a high amplitude spike and slow wave activity, suggesting that deficiency in this hypothetical "facilitory circuit might be an indication of the physiological counterpart of the psychological observations in the schizophrenic patient."

A chapter of considerable interest to the psychological clinician is Goldman's excellent evaluation of the "reparative" type of psychotherapy as contrasted with the strict analytic procedure. This author issues a much-needed warning against the insidious introduction of a hierarchy of acceptability where analysis reigns supreme, regardless of its applicability in a given case.

Ackerman's study of the reciprocal interlocking patterns of pathology in family relationships, and his abandonment of the classic child analysis to include the larger Gestalt of family life, reflects another constructive break with a traditional framework in the direction of increased freedom of inquiry.

The great majority of the authors have been reared under, and subscribe to, Rado's adaptational theory of psychodynamics. At times the specificity of the occasion leads them to come close to delivering apologies for their adaptational creed. Nonetheless, this reviewer would subscribe to Kardiner's comments that "a frame of reference must be judged by performance," and the adaptational theory "has yielded much useful knowledge and opened vast areas of empiric research."



*Self-analysis would be extraordinarily helpful were it not for the countertransference.*

—SIEGFRIED BERNFELD



# FILMS

BY ADOLPH MANOIL, Film Editor

## Films

### PENOLOGY

#### The Search: Criminology Research

University of California, School of Criminology at Berkeley, California. CBS Television, producer. 16-mm. motion picture film, black and white, sound, 27 min., 1955. Available through Young America Films, 18 East 41st St., New York 17, N. Y. \$125.00, rental \$5.00.

The organization of various penal institutions and the treatment of the criminal are an accurate reflection of the prevailing views on criminology. The recognition of the criminal as a socially ill person in need of medical and psychological treatment represents a marked advance in the scientific approach to the understanding, rehabilitation, and prevention of crime.

While the need for a scientific approach to the analysis and understanding of criminal behavior has long been recognized by scientists and other enlightened persons, the public at large still lacks enough information for a better understanding of the problem. Prejudiced attitudes and biased views on the nature of criminal behavior and the need for his vengeful punishment are a hindrance to the belief in treatment and rehabilitation. The similarity of physical disease to the condition of the mentally ill should point the way toward an increased mass education.

The film under consideration should be viewed as a means for mass education in the area of penological work. It shows characteristic aspects of the organization and work at the San Quentin Prison in California. Various film sequences present the receiving of criminals, the guidance clinic, the classification office, testing procedures, and other general aspects of the life of the inmates. Interviews with inmates and prison officials are also shown. The existence of three conflicting views on the criminal and his problems as expressed by the inmates, prison officials, and the general public is also indicated.

The film emphasizes the need for an attitude favoring rehabilitation with appropriate understanding of the criminal. The value of educational means for achieving good results is stressed throughout.

The film as a tool for mass education should prove useful with lay audiences. If used with students in psychology or criminology, it could be shown as a basis for discussion and the analysis of various penological problems.

### HEREDITY

#### Human Heredity

Churchill-Wexler Film Productions. 16-mm. motion picture film, color, sound, 18 min., 1956. Available through E. C. Brown Trust, 220 S.W. Alder Street, Portland 4, Oregon. \$170.00.

Human heredity in its various aspects from the fertilization of the egg to anthropometric characteristics of the adult is clearly presented at the level of the high-school student. This is a classroom-type

film in the series, *Understanding Ourselves*, sponsored by the E. C. Brown Trust.

Through drawings, animation, presentation of actual cases, and appropriate narration, the film demonstrates the process of heredity with clear illustration of fertilization, sperm, ovum, chromosome pattern, sex chromosomes, dominant and recessive traits, as well as the nature and origin of identical and fraternal twins.

Cultural factors and their contribution to the total pattern of behavior and personality characteristics are also illustrated.

The film is presented as a classroom lesson on heredity with requests for questions from the pupils. As such the film, besides its content and information value, has also the merit of being a good example of effective teaching. The presentation of the subject is well organized, the illustrations appropriate and well integrated within the unit presented.

The film is supplemented with a well-written guide for teachers and discussion leaders, which, besides the description of the film, gives suggestions for its use, a list of probable questions from the audience, and reading references. The film should be particularly useful for introductory classes in the study of heredity.



CULTURAL AND BIOLOGICAL INHERITANCE  
(From the film *Human Heredity*, E. C. Brown Trust, Portland, Ore.)

**Nonverbal Communication**

(Psychotherapeutic interviewing series, part IV)

Veterans Administration, producer. 16-mm. motion picture film, black and white, sound, 27 min., 1952. Available through Central Office Film Library, Visual Aids Division, Veterans Administration Central Office, Washington 25, D. C.

Characteristic aspects of nonverbal communication between patient and psychiatrist during the psychiatric interview are illustrated.

Various film sequences show actual interview situations in which nonverbal aspects of communication, like facial expression, posture, gestures, tone of voice, general appearance and laughter, appear as many clues to the condition of the patient and his interaction with the psychotherapist. Through the presentation of film sequences with and without sound track, certain discrepancies between gestures and words or between speech tempo and total expression can be observed.

The film is presented as an informal classroom lecture on nonverbal communication as an integral part of the psychiatric interview. The need for observation and use of nonverbal aspects of communication is emphasized.

The awareness on the part of the therapist of these aspects of communication should be used as a means for obtaining information and furthering the therapeutic process.

The use of nonverbal communication as a clue to the significance of behavioral patterns would require a particular mental set on the part of the psychotherapist, and presumably a systematic codification of various types of expressive behavior. While the psychotherapist could learn to pay more attention to nonverbal clues, the meaningful codification of these clues is not easily achieved. Actually, the whole area of nonverbal communication appears as an extension of the problem of judging emotions from facial expressions (See CP, 1, 54f.). Now, from what is known about the difficulties encountered in the limited field of facial expression of emotion, one wonders what is the actual practical value of the whole theory of nonverbal communication.

Expressive aspects of behavior appear as dynamic, direct, and immediate communication, consequently unaltered by their crystalization into verbal symbols. What is obtained by avoiding the use of words is, however, not necessarily nearer to the truth since cultural factors and learning, operating at the nonverbal level, would make expressive behavior also into a symbol system. And, if expressive behavior to be intelligible and communicable has to be codified, the nature of the problem would shift only from verbal codification to nonverbal codification.

The intuitive character in nonverbal communication can be recognized however, only as a supplementary relative clue to human interaction.

Recently, nonverbal communication has become a subject of interest in direct relation with communication theory. An attempt at systematic presentation and a theory of nonverbal communication is found in Jurgen Ruesch and Weldon Kees, *Nonverbal Communication: Notes on the Visual Perception of Human Relations*, Berkeley and Los Angeles: University of California Press, 1956, Pp. iv + 201.

Verbal communication as relevant to human social interaction and its applications to psychiatric problems are presented in Jurgen Ruesch and Gregory Bateson, *Communication, the Social Matrix of Psychiatry*, New York, W. W. Norton, 1951, Pp. vi + 314.

Other films in the area of nonverbal communication are: *Communication and Interaction on Three Families* (CP 1, p. 185), *Children in Groups*, 25 min., 1954, *A Problem Child Before and After Therapy*, 25 min., 1955, *Approaches and Leave-takings*, 12 min., 1955, and *The Child Who Does Not Speak*, 30 min., 1955 (from Jurgen Ruesch and Weldon Kees, op. cit., pp. 200).

**SUPPLEMENTARY REFERENCES**

Other 16-mm. films in the same series, available through Veterans Administration, Washington 25, D. C. are:

*Introduction* (Psychotherapeutic interviewing series, part i) 10 min., 1950.

*A method of procedure* (Psychotherapeutic interviewing series, part ii) 32 min., 1950.

*An approach to understanding dynamics* (Psychotherapeutic interviewing series, part iii) 32 min., 1952.

*A clinical picture of claustrophobia* (Psychotherapeutic interviewing series, part v) 31 min., 1952.

*A clinical picture of anxiety hysteria* (Psychotherapeutic interviewing series, part vi) 26 min., 1952.

**PSYCHOLOGY OF PERCEPTION****The Search: Visual Perception**

Ohio State University. CBS Television, producer. 16-mm. motion picture film, black and white, sound, 27 min., 1955. Available through Young America Films, 18 East 41st St., New York 17, N. Y. and other distributors. \$125.00, rental \$5.00.

General aspects of visual perception with emphasis on practical applications are suggestively presented. The perceptive process as a reorganization of sensory material could be improved through a better awareness of its dynamics and through practice. The film illustrates organization of form, ambiguous figures, the use of the tachistoscope, clinical perimeter, and training in reading.

Mirror reading and its correction, applications to the study of the reliability of eye-witnesses, the use of a reading accelerator, and general training in perception are also illustrated.

The film could be used with introductory classes in psychology as a means of presenting a general view of various aspects of the psychology of perception as to the methods for its study and their practical applications.

**CHILD PSYCHOLOGY****The Search: Normalcy in Children**

Yale University. CBS Television, producer. 16-mm. motion picture film, black and white, sound, 27 min., 1955. Available through Young America Films, 18 East 41st St., New York 17, N. Y. and other distributors. \$125.00, rental \$5.00.

Various approaches to the study of children are shown as they are followed at the Child Study Center of Yale University.

The film shows how children are observed through the one-way-vision screen and illustrates the importance of various psychological and physical measurements.

The study of the child itself is supplemented by research on family life and

especially the attitude of the mother during pregnancy.

The feelings of both parents during the expectancy period are considered important. They are illustrated through the presentation of two interviews with the parents. The film shows also a delivery room and characteristic situations attending the process of childbirth.

The importance of individual differences, the concept of the range of normalcy, and the need for research are stressed throughout.

The film could be used profitably with classes in child and developmental psychology as well as with lay audiences.

#### EDUCATIONAL PSYCHOLOGY

### **The Search: Juvenile Delinquency**

Wayne University. CBS Television, producer. 16-mm. motion picture film, black and white, sound, 27 min., 1955. Available through Young America Films, 18 East 41st St., New York 17, N. Y., and other distributors. \$125.00, rental \$5.00.

The work on various aspects of delinquency has resulted in a series of generally accepted principles according to which environmental and organic-constitutional factors are the main determiners of crime. Delinquent behavior is explained as a result of poor home life, neighborhood groups, and inadequate social conditions. In certain cases the biological make-up of the individual and mental illness appear as equally responsible. In general, the individual is presented as a victim of circumstances, the concept of responsibility is almost completely eliminated as a contributing factor.

The use of the term juvenile delinquency indicates the legal distinction between the adult capable of assuming responsibility and the youth who is not yet socially responsible. The only criterion for differentiation here is the chronological age or a particular mental condition.

The young man who commits a delinquent act has not learned to distinguish between right and wrong, between acceptable and unacceptable social behavior. The ability to distinguish right from wrong is a matter of learning that assumes, moreover, that any individual biologically 'normal' can learn

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### *1956 titles*

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and that the rules governing a well-ordered society are not above the learning capability of the individual. Then, if there are delinquents, they are not normal or in any case they are unable to adjust to the rules prevailing in a given culture. With the exception of pathological cases, any form of delinquency represents a learning failure. The basic problem of delinquency thus becomes an educational problem in terms of exactly what is to be learned. This conclusion means that, besides general environmental factors, a prominent place must be given to values. An effort at mass education should emphasize the importance of values as especially relevant to socially acceptable behavior.

Most of the literature on delinquency and educational films in this field present very accurate descriptions of causal factors that show the delinquent as a necessary result of circumstances. The place of values is almost completely neglected; they are not presented as determining factors on at least equal footing with economic, social, or other environmental factors.

Some reference to values is being made but it is limited to such vague ideas as home life, neighborhood conditions, or schooling. Prevention, treatment, and rehabilitation are recognized as basic approaches to delinquency without, however, explicit emphasis on their basic meaning in terms of recognition and practice of values.

The film cited above presents excellently the problem of juvenile delinquency in its basic operational aspects, but without clear emphasis on values as a guide to conduct. It illustrates the effective cooperation between an institution for research and learning (Educational Psychology Department, Wayne University) and the Police Department (Youth Bureau) of Detroit.

Characteristic factors of delinquent behavior are clearly illustrated through the presentation of a few 'typical' cases of juvenile delinquents. A Negro child who has stolen a pair of gloves and other objects from a department store represents the 'good risk' type. He is a shoplifter on imitation or impulse who after an interview with the police officer is returned to the care of his parents. This case illustrates also the benevolent and understanding attitude of the police. The boy

has made a mistake and with better surveillance will probably not repeat it.

The second case is that of a mentally ill child with obsessions of killing expressed in his phantasies and drawings. He is a psychiatric case in need of special treatment.

A third case is that of a boy who committed various delinquent acts of a more serious nature under the influence of a gang of older boys. He is the gang-type delinquent who comes from a broken home and as such is under the influence of the neighborhood gang. He is put in a boarding house which should provide for his social needs without bad influences.

Finally, the fourth case, the 'lone wolf' type is represented by a boy on probation who performs delinquent acts as a result of his inadequate home life. Brought before the judge with his parents he shows stubbornness, indifference, and particular revulsion against his mother. The boy is placed under the care of an uncle.

The film emphasizes the nature of delinquency as related to environmental conditions and individual differences. It could be used profitably in classes in general, social, and educational psychology; also with lay audiences.

#### LANGUAGE STUDY

### **The Search: New Language Techniques**

University of Michigan. CBS Television, producer. 16-mm. motion picture film, black and white, sound, 27 min., 1955. Available through Young America Films, 18 East 41st St., New York 17, N. Y. and other distributors. \$125.00, rental \$5.00.

The work of the English Language Institute of the University of Michigan in teaching English to foreign students is presented. Various film sequences show the arrival of the students, their difficulties with English as a second language, and characteristic approaches to teaching it.

The language is presented within a social context with emphasis on its dynamic aspects. Motivational factors, practice, and social conditions are appropriately used. In this way learning a foreign language becomes a meaningful effort toward acquiring a skill recognized as a necessary communication tool.

#### SOCIAL PSYCHOLOGY

### **Asian Earth**

J. Michael Hagopian. 16-mm., black and white or color, sound, 22 min., 1954. Available through Atlantic Productions, Inc., P.O. Box 8666, Hollywood 46, California. \$120.00, color \$200.00.

Documentary films depicting the life of people in different lands present first-hand information on behavioral and motivational factors as molded by characteristic cultural patterns. Such documentaries not only provide information for a better understanding of other peoples and cultures but also allow for detailed analysis of relevant aspects of social behavior.

*Asian Earth* presents characteristic aspects of the life of a peasant Hindu family of the Lower Ganges Valley. The film shows various members of the family at work, at play, and at worship. The cooperative nature of the work of the family, their adjustment to the conditions of the soil, the use of primitive agricultural implements, as well as their struggle with the inclemencies of nature, are clearly shown. Their faith, religious manifestations, and general economic hardships are also illustrated.

The film is organized around two cycles that present the family life during a day, and during a year. Specific film sequences could be singled out for analysis. As a whole the films should provide for a better understanding of human behavior as directly related to natural environmental conditions. It should also create a favorable atmosphere for a more appropriate international understanding.

The film could be used with classes in social psychology, especially within the context of the study of international relations. With proper leadership it should prove useful also with lay audiences for the promotion of international understanding. The film is the first in a series of discussion films on *Families of Our World*.



*The success of language in conveying information is vastly overrated, especially in learned circles.*

—ALFRED NORTH WHITEHEAD



## Helen Keller in Her Story

Produced by Nancy Hamilton and narrated by Katharine Cornell. 16-mm. motion picture film, black and white, sound, 45 min., 1956. Available through Louis De Rochemont Associates Film Library, 13 East 37th St., New York 16, N. Y. \$100.00, rental \$12.50.

The life of Helen Keller from early childhood to her present age of 76 is dramatically presented.

The film shows Helen Keller and her teacher at home and abroad, at work and play, and in various other life situations.

The interaction between her and her companions through the intermediary of finger language is well illustrated. Helen Keller's ability to follow and understand music through vibrations received through her hands and body, her reading habits, efforts at speech, spatial orientation, identification of individuals through palpating their faces with her hands, and many other activities of her life are all clearly shown.

Miss Keller is shown in her visits to foreign countries, in appeals for charitable undertakings, and in her other various strivings to communicate with people. Her voice is hardly intelligible but the message is conveyed with the help of her companion.

Ann Sullivan Macy and Polly Thomson are also shown in their work with her.

The film is a remarkable documentary on the life story of Helen Keller; it also conveys the drama of her life in her hopes, aspirations, and achievements.

"It is not blindness or deafness," she says, that brings me my darkest hours. It is the acute disappointment of not being able to speak normally. Longingly I feel how much more good I could have done if I had acquired normal speech. But out of this dark experience I understand more fully all human strivings, thwarted ambitions and infinite capacity of hope."

The film should prove effective with classes in psychology as well as with lay audiences. Characteristic sequences could be selected for analysis and interpretation. These sequences could refer either to specific data on Helen Keller's life and her manipulation of the environment or to the qualitative aspects of her behavior in terms of aspirations and motivation.

The film could be usefully supple-

mented with the reading of Van Wyck Brooks, *Helen Keller, Sketch for a Portrait*, New York, E. P. Dutton, 1956. Pp. ii + 166.

## Film Research

### The Influence of Four Film Use Methods on Community Planning

University of Wisconsin, 1955. Pp. vi + 23.

This pamphlet is a nontechnical version of a research report on the methodology of the use of film, (*A Comparison of the Relative Effectiveness of Four Methods of Using a Film in Community Planning*. A report to the Kellogg Foundation of a project conducted by the School of Education, University of Wisconsin, and the Bureau of Audio-Visual Instruction, University Extension Division, University of Wisconsin. Mimeographed. Pp. 132.)

The problem investigated concerns the

use of films by rural community leaders in presenting, discussing, and promoting community planning and improvement.

A film utilization manual for use with the film *Tale of Two Cities* was prepared and an experiment designed for the use of four methods of presentation of the film: (1) use of the manual as prepared, plus a local leader, (2) the manual adapted by the local leader, (3) the manual adapted by a local committee, and (4) the manual as prepared plus an outside leader.

The results show that the use of a well-prepared manual by a capable local leader would probably give better results than those obtained if the manual would be used by an outside leader, however well qualified he may be.

The report is supplemented with 17 figures, the manual of instructions, and questionnaires.

The report as a whole represents a valuable contribution to practical application of film methodology.

# ON THE OTHER HAND . . .

## THE UNIVERSAL SCHOLAR

There is something appealing to the imagination in the idea of a universal scholar, prepared to follow his research wherever it may lead, through the intricacies of mathematics, apparatus construction, foreign-language bibliography, or whatever else the pursuit of truth may demand. As the self-sufficient researcher in his lonely garret or basement lab, or as the coordinator of a vast interdisciplinary project, this image satisfies our desire for a scholar of heroic proportions, displaying all the breadth of understanding and versatility of skill demanded by Graeco-Renaissance ideals.

There is something equally appealing in the universal hero of detective fiction, a figure such as Charteris' dashing buccaneer, the Saint. Equally at home flying a plane, enchanting society with suave intellectualism, or shooting it out against seemingly hopeless odds, he also fulfills our desire for a hero bigger than life, never at a loss in any situation, displaying a universal competence of which we lesser mortals can only dream.

In these days of complexity, specialization, and teamwork, is the ideal of the great de-

tective really much less practical, much more restricted to the pages of escape literature, than the faith in the universal scholar? Neither is completely fictional; for each there are men whose innate endowments, education, and opportunities (or needs) have brought them close to the ideal. But as practical objectives of education, even for the select few, is the universal scholar any more than the whodunit hero to be regarded as the goal?

If, as the Editor of *CP* has suggested (November 1956), the study of foreign languages is still vital to the education of the well-rounded scholar, surely this is also true of many other subjects. If he who speaks only his native tongue (however well) lacks adequate breadth, surely the same is true of him who lacks the universal language of mathematics, or the physical knowledge and engineering skills which underlie so much of modern civilization, or the chemical and surgical skills basic to the study of life-processes, or the anthropological, historical, and literary background for appreciating the complexities of the whole person in his cultural context. No area of

knowledge is an island unto itself; each is part of an interdependent process which encompasses the entire universe.

When this principle of universality has been stated, accepted, and elevated to the status of a platitude, what follows? Must every psychologist, to take the example nearest home, be his own engineer, mathematician, surgeon, translator, and ethnographer? If this be taken as our ideal, we may indeed produce (or, more accurately perhaps, select and turn loose) a few scholars in the heroic tradition, men whom history will remember with awe as universal geniuses. But the great mass of the psychological endeavor is likely to find itself so weighted

down with extra gadgets, each admittedly valuable by itself, that it never gets off the ground.

Must we choose between a few pioneers in the great garret-and-cellar tradition, blazing trails which there are no competent second-raters to follow, and a great mass of half-educated, semi-competent grubbers? Is there not some compromise which will permit scholars to see and appreciate many related areas without being forced either to become experts in all of them or to fall by the wayside? Cannot interdisciplinary studies be advanced to the point where the student learns how much is known in many areas and where this knowledge may be obtained, but

without trying to master all this knowledge himself? And would not international understanding actually be more advanced by one year of general intercultural study based on translations (to return to the comment by CP's Editor) than by three years spent obtaining the rudiments of French, German, and Russian?

If the answer to these questions is *Yes*, we may look forward to continuing progress both in scholarship and in world community. If it is *No*, then the decision facing psychology, scholarship, and the entire educated world is a tragic dilemma indeed.

W. F. HILL

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## BOOKS RECEIVED

31 January 1957

- ABRAMSON, H. A. *The patient speaks: mother story verbatim in psychoanalysis of allergic illness*. New York: Vantage Press, 1957. Pp. xxi + 239. \$3.50.
- ADVERTISING RESEARCH FOUNDATION. *A bibliography of theory and research techniques in the field of human motivation*. New York: Advertising Research Foundation, 1956. Pp. v + 117.
- BERNARD, H. W. *Adolescent development in American culture*. Yonkers-on-Hudson, N. Y.: World Book Company, 1957. Pp. xii + 644. \$5.75.
- BERNARD, H. W. *Toward better personal adjustment*. (2nd ed.) New York: McGraw-Hill, 1957. Pp. vii + 454. \$5.50.
- BERRIEN, F. K., & W. H. BASH. *Human relations: comments and cases*. (2nd ed.) New York: Harper & Brothers, 1957. Pp. xii + 564. \$5.00.
- BOND, G. L., & M. A. TINKER. *Reading difficulties: their diagnosis and correction*. New York: Appleton-Century-Crofts, 1957. Pp. viii + 486. \$5.25.
- CHERRY, COLIN. *On human communication: a review, a survey, and a criticism*. Cambridge, Mass.: Technology Press; New York: John Wiley & Sons; London: Chapman & Hall, 1957. Pp. xiv + 333. \$6.75.
- DENNIS, LORRAINE BRADT. *Psychology of human behavior for nurses*. Philadelphia: W. B. Saunders, 1957. Pp. x + 250. \$3.50.
- DIXON, W. J., & F. J. MASSEY, JR. *Introduction to statistical analysis*. (2nd ed.) New York: McGraw-Hill, 1957. Pp. xiii + 488. \$6.00.
- EHRENWALD, JAN (Ed.). *From medicine man to Freud: an anthology*. New York: Dell Publishing Company, 1956. Pp. 416. \$5.00.
- FLOOD, DOM PETER (Ed.). *New problems in medical ethics*. Vol. III. (Trans. from the French by Malachy Gerard Carroll.) Westminster, Md.: Newman Press, 1957. Pp. iv + 299. \$4.50.
- FRAISSE, PAUL. *Les structures rythmiques: étude psychologique*. Louvain: Publications Universitaires de Louvain, 1956. Pp. viii + 124. FB 125.
- FROMM, ERICH. *The forgotten language: an introduction to the understanding of dreams, fairy tales and myths*. New York: Grove Press, 1957 (first published by Rinehart, New York, 1951). Pp. vii + 263. \$1.75.
- FUNKENSTEIN, D. H., & G. H. WILKIE (Eds.). *Student mental health: an annotated bibliography*. London: World Federation for Mental Health; Paris: International Association of Universities, 1956. Pp. v + 297.
- GROTJAHN, MARTIN. *Beyond laughter*. New York: Blakiston Division, McGraw-Hill, 1957. Pp. xvi + 285. \$6.00.
- HALL, C. S., & GARDNER LINDZEY. *Theories of personality*. New York: John Wiley & Sons, 1957. Pp. xi + 572. \$6.50.
- HECTOR, H. *Der 7-Quadrat-Test*. Paderborn, Germany: Author, 1954. Pp. 46.
- KINGSLEY, H. L., & RALPH GARRY. *The nature and conditions of learning*. (2nd ed.) Englewood Cliffs, N. J.: Prentice-Hall, 1957. Pp. ix + 565. \$6.75.
- LANDAU, M. E. *Women of forty: the menopausal syndrome*. New York: Philosophical Library, 1956. Pp. 49. \$2.50.
- LARSSON, KNUT. *Conditioning and sexual behavior in the male albino rat*. (Acta Psychologica Gothoburgensia, I.) Stockholm: Almqvist & Wiksell, 1956. Pp. 269. Sw. kr. 23:-.
- LEARY, TIMOTHY. *Interpersonal diagnosis of personality: a functional theory and methodology for personality evaluation*. New York: Ronald Press, 1957. Pp. xix + 518. \$12.00.
- SLOANE, E. H. *Psychology for living*. Annapolis, Md.: Owl Press, 1957. Pp. vii + 136. \$3.00.
- SMITH, B. L., & CHITRA M. SMITH (Eds.). *International communication and political opinion: a guide to the literature*. (Prepared for the RAND Corporation by the Bureau of Social Science Research, Washington, D. C.) Princeton: Princeton University Press, 1956. Pp. xi + 325. \$6.00.
- SUMNER, C. E., JR. *Factors in effective administration*. New York: Graduate School of Business, Columbia University, 1956. Pp. vii + 286. \$3.25.
- TANNER, J. M., & BÄRBEI INHELDER (Eds.). *Discussions on child development*. 2 vols. (Proceedings of the First and Second Meetings of the World Health Organization Study Group on the Psychobiological Development of the Child, Geneva, 1953, London, 1954.) New York: International Universities Press, 1957. Pp. 240; 271. Set \$10.00.
- TITONE, RANZO. *Presupposti teorici della psicologia funzionale*. Turin: Pontificio Ateneo Salesiano, 1956. Pp. 63.
- VAN RIPER, CHARLES, & LESLIE GRUBER. *A casebook in stuttering*. New York: Harper & Brothers, 1957. Pp. 149. \$2.50.
- WALLIN, J. E. W. *Mental deficiency: in relation to problems of genesis, social and occupational consequences, utilization, control and prevention*. Brandon, Vt.: Journal of Clinical Psychology, 1956. Pp. xv + 200. \$5.00.
- WILLIAMS, R. J. *Biochemical individuality: the basis for the genotrophic concept*. New York: John Wiley & Sons, 1956. Pp. xiii + 214. \$5.75.





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